



# **Interactive WhiteBoard V4.31**

## **Software User Manual**

# Whiteboard\_V4.31 Installation and Software Calibration

## 1 Software Installation no driver

### 1.1 Software Installation

Operate "WhiteBoard\_V4.31.exe", install the software, first step, pls choose the software language as photo below . ( Photo from 1-11 to 1-16 )

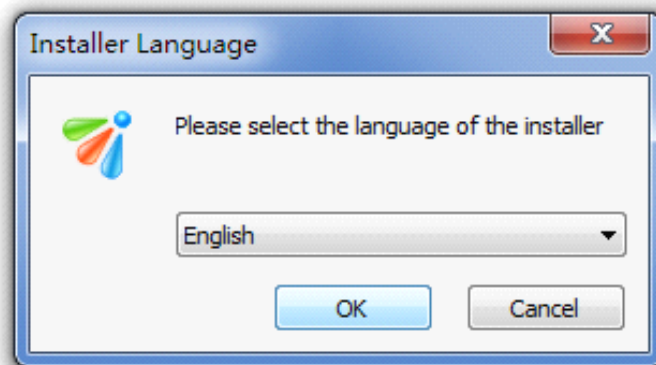


Photo 1-11



Photo 1-12

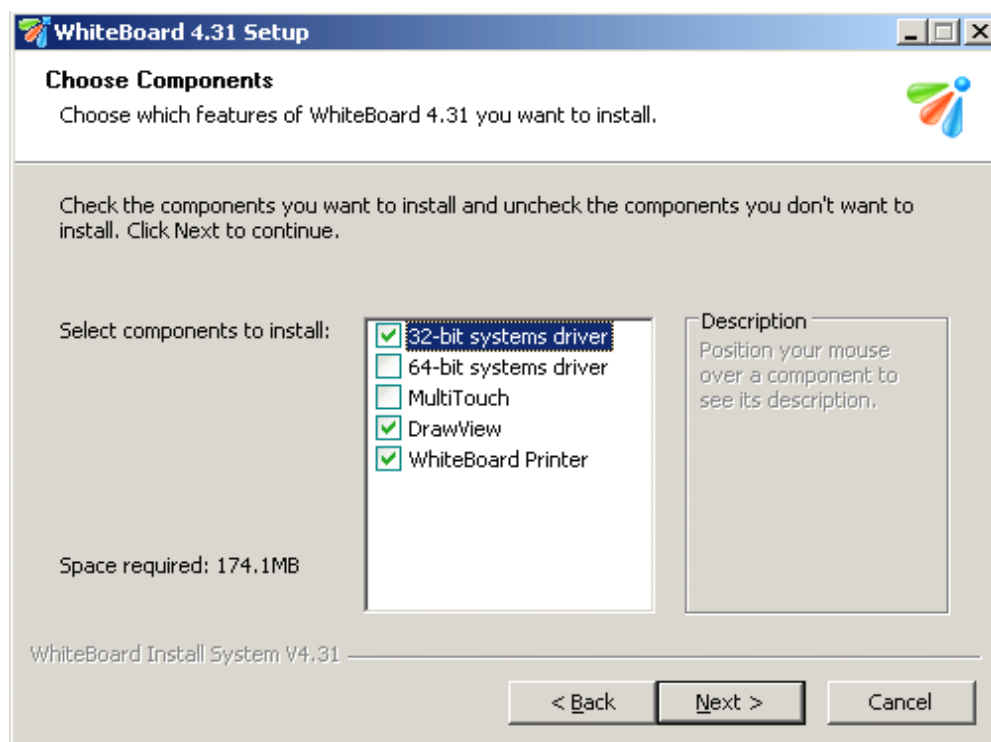


Photo 1-13

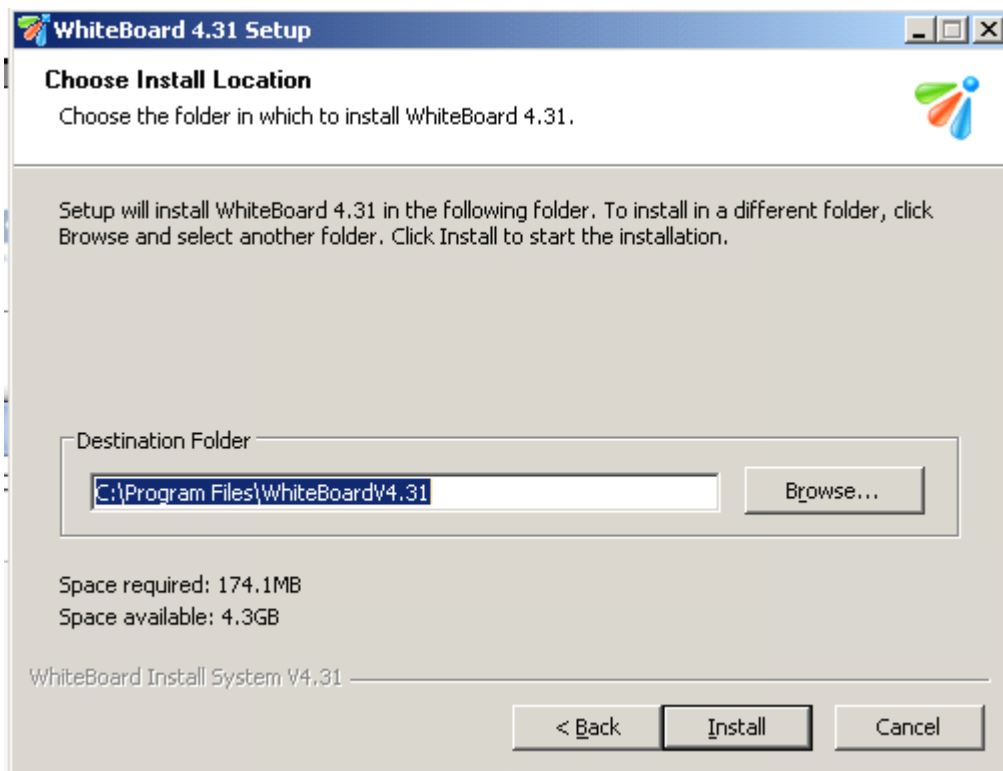


Photo 1-14

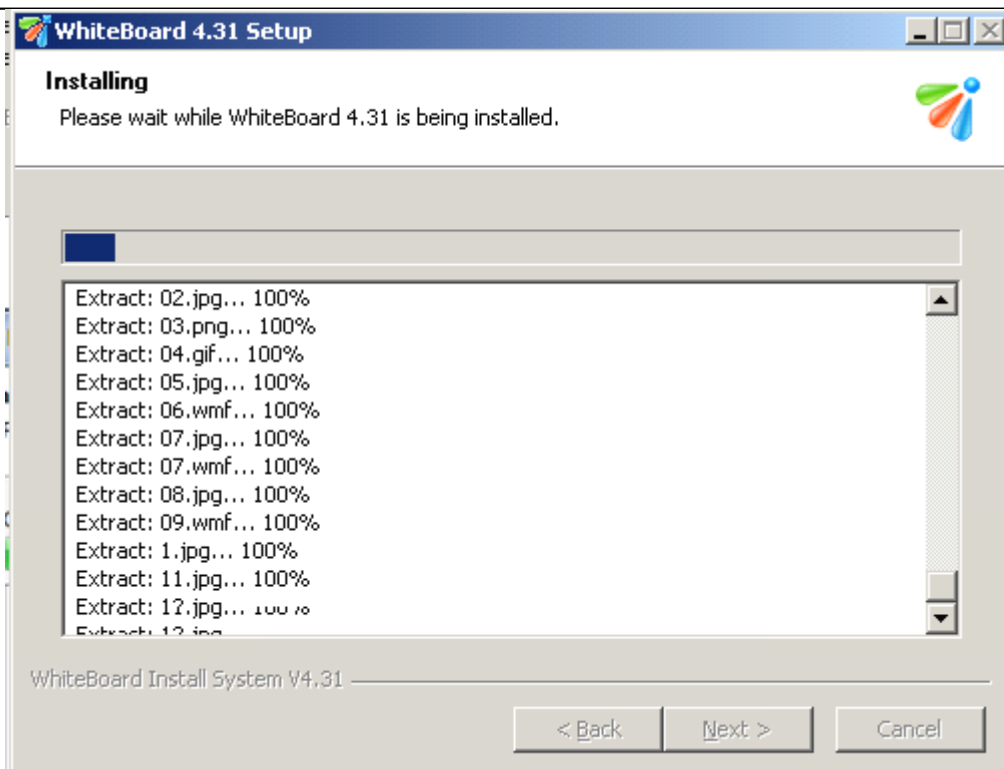


Photo 1-15



Photo 1-16

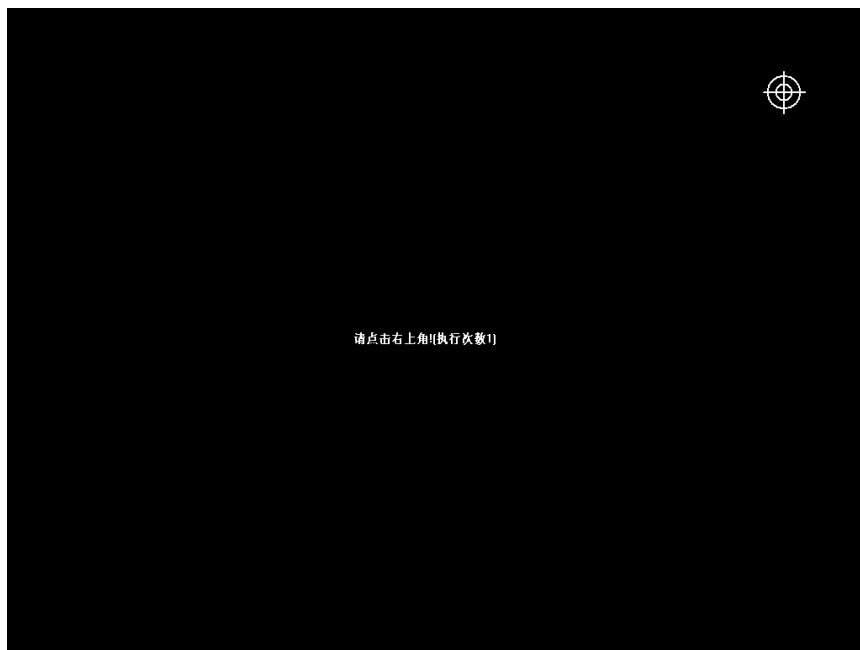
## 2 Software Calibration

### 2.1 Special support software for calibration: "oppooint.exe"

1. Operate the "oppooint.exe" from the CD, then double click; then you will see the white calibration point (Photo 2-1 ), and use the finger or other pen to touch the center of the point, then step by step from the right corner to left corner (Photo 2-2. 2-3. 2-4).



**Photo 2-1**



**Photo 2-2**



**Photo 2-3**



**Photo 2-4**



## **2.2 Use the support tablet PC adjustment from Win 7 computer system:**

1. Control Panel---TABLET PC---choose "adjust", then you will have 16 points calibration the same way as above, then save your adjustment---Finish calibration.

### **Remark :**

- 1. If your pen or finger is not at the center of the point or click wrong, pls click ESC to quit and then make the calibration again;**
- 2. Calibration, the pen or finger must be straight on the surface of the board;**
- 3. When change the projector or reinstall the software, pls make the calibration again;**

**Mouse right function: Click the board and stop for 2 seconds, then you will see right mouse function;**

# Software Application Instruction

## 1. WhiteBoard\_4.31 Instruction

WhiteBoard\_4.31 software can be used in education and business. It is designed to be an interactive user friendly tool easy use as a powerful tool for education and business, where the classroom will be more productive and active, and business is more practical and functional using our up to date WhiteBoard\_V4.31.

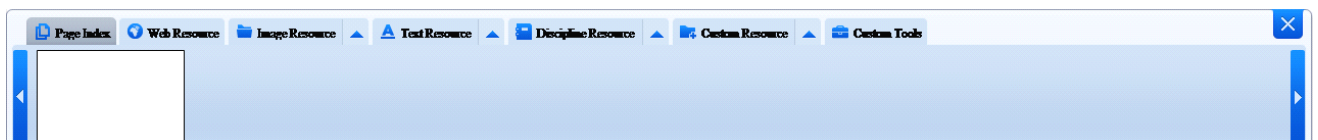
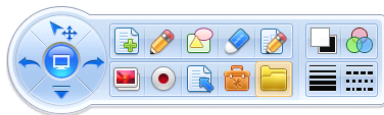
In replace of the mouse, users can achieve the functions such as mobile, click, double click, drag, right key so as to control PC with fingers (or any non-translucent objects) and make use of supporting software to achieve writing, erasure, label, drag, magnifying, screen shade, spotlights, print Screen, screen conservation, screen recording and playback, handwriting recognition, keyboard input, text input, links from web to video and sound, insert and control. With the help of the third-party remote collaboration software, not only achieve the functions of long-distance education and meetings which are powerful Interactive teaching and learning and demonstration, but

also create multimedia courseware for the classroom and the meetings.

This manual which apply to the installation of all types of the GK-XXX series, is the Installation manual of interactive Whiteboard You can see the software's help files or the software manual" Board series interactive Whiteboard – V4.31 software instruction manual " for the use of supporting software.

## 1. Software interface :

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## 2. WhiteBoard\_4.31 main functions

Page functions	including:- page color and condition: such as color (white, green and black) pages, and pages conditions, such as: (image screen and transparent) pages ,,, etc.
Pen functions	including: Pencil, Soft Pen, Highlight Pen, Texture Pen, Brush Pen, Intelligent Pen, Object Pen
Figure functions	including Line, Triangle, Rectangular Triangle, Ellipse, Round, Pentagon, Five-pointed Star, Six-angular, Rhombus, Arrows, Double Arrow, Angle, Cube, Cylinder, Cone, Rounded Rectangle, Arc, Sector, Parallelogram
Eraser functions	including Object Eraser, Bitmap Eraser(Small), Bitmap Eraser(Medium), Bitmap Eraser(Big), Cover Eraser
Insert object functions	including Insert Image, Insert Text, Insert Video, Insert Flash, Insert Office File, Insert Cover, Insert Gif image.. etc.
Recorder functions	including Record, Play, Pause, Stop, Save, Open function.
Page Operation	including Zoom In, Zoom Out, Free Move, Move Back, Undo, Redo, Page Up, Page Down, Select, Clear Page, Delete Page, Screen or Soft

functions	Page.
Auxiliary Tools	including Searchlight, Curtain, Magnifying Glass, Screen Camera, Ruler, Protractor, Compasses, Triangle Ruler, Record Tools, Video Camera, Fill Color, Dice, Math Tools, Handwriting
Word、 Excel notes	Annotate the opening MS-Word or MS-Excel.
Resource function	including page Resource preview, web resource, Image Resource, Text Resource, Discipline Resource, Custom Resource, Custom Tools, Add Resource etc.
Color setting	setting the color of pens and background.
Line width setting	setting the width of lines and objects.
Arrow Line setting	setting the Arrow line, shape and direction.
Transparency setting	setting transparency of objects.
Other functions	including select, screen or soft page, undo, redo, read the word, write board etc.

Main menu functions	including New File, Open File, Import File, Save Page, Save File, Save as, Print this Page, Print all Pages, Send Email, Language, Setting, Help, About, Exit.
Right menu functions	including copy, cut, Copy, Paste, Clone, Lock, Delete, Rotate, Rotate45, Rotate90, Rotate180, Rotate270, Combine, Cancel Combine, Layer Sequence, On Top, On Bottom, Move Up, Move Down, Add to Gallery, Mirror, Horizontal, Vertical, Flip, Horizontal, Vertical, Drag Copy, Hyperlink, Animation.

### 3. Page function







There are six pages setting as default, including white page, green page, black page, image page, screen page, transparent page.

Page interface :



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Page description :

	white page	create a white page, can change the color by background color
	black page	create a black page, can change the color by background color
	green page	create a green page, can change the color by background color
	image page	create an image page as background,can select image from the image folder, user can also add pictures into the image folder for use.
	screen page	screen page can use the computer screen as background
	transparent page	<p>this is a special page. It is transparent. so users can use it over any displayed screen on the computer and can write on it and do the normal drawview functions on it.</p> <p>for example, you can open a video file, then open the WhiteBoard_4.31, create a transparent page. make notes on the video while the video is playing.</p>

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#### 4. Pen Tray

The Pen Tray used for drawing and writing on the board. you can draw lines, figures and write. there are seven pens in the pens tray as follows:- pencil, soft pen, highlight pen, Texture Pen, Brush Pen, Intelligent Pen and Object Pen .



Interface of pens :



Pens Functions introduction :

	Pencil	it's the basic pen. used to draw figures, line or write words. you can change the color, lines width and style and transparency.
	Soft pen	this pen has a stroke. designed mainly for writing texts ; the color, width and transparency can be changed.
	Highlight pen	this pen has stroke and it comes with half-transparency. can be used for marking over the already written text. the color, width and transparency can be changed.



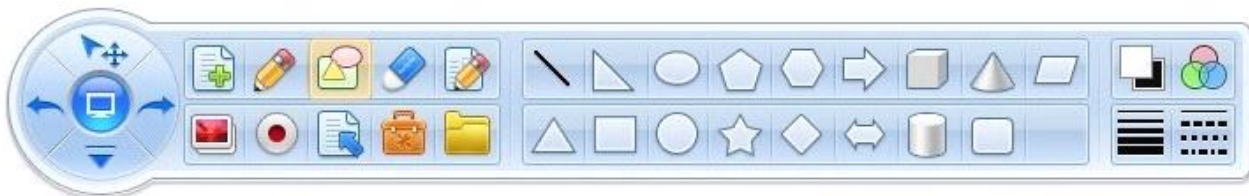
	<p>Texture pen</p>	<p>this pen can make artistic effect. click this icon, chose the image you like, adjust the width, you can draw a beautiful picture. users can add the picture in the folder for use and also the width and transparency can be changed.</p>
	<p>Brush pen</p>	<p>this pen has stroke and the width can be changed when drawing speed changes. The drawing like traditional Chinese pen.</p> <p>The color, width and transparency can be changed.</p>
	<p>Intelligent Pen</p>	<p>this pen can fix and recognize the drawing lines into standard straight line, broken line, rectangle, oval, circle.</p> <p>the color, width and transparency can be changed.</p>
	<p>Object Pen</p>	<p>this pen is made for art effect. click this icon, select the right figure, the line make up of many different figures. the figures, transparency can be changed.</p>

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## 5.Introduction to figure tools

Figure tools are a drawing tools designed to help the user to choose a ready made shapes and display them drawing standard figures on the board directly, which including: including Line, Triangle, Rectangular Triangle, Ellipse, Round, Pentagon, Five-pointed Star, Sixth angled shapes, Rhombus, Arrows, Double Arrow, Angle, Cube, Cylinder, Cone, Rounded Rectangle, Arc, Sector, Parallelogram tools.

Interface of figure tools :



There are two kind of figure tools, one is line figures 2D, the other is three Dimension 3D figures.

2D figures are made up by lines. The 3D figures are 3D shapes both can be edited, when moved the figures data will change accordingly, that's includes line dimensions, angles , there are also arcs in the figure. Note that figures can not be edited, it can only be moved, zoom in or zoom out and refigures.



## 6. Introduction to erasers


Erasers can erase the object drawing in the software, it includes Object Eraser, bitmap eraser and cover eraser etc.

Interface of erasers :



About different eraser tools :

	Object Eraser tool	is designed to erase any thing you are drawing or writing or drawing while using the WhiteBoard 4.31 software
	Bitmap eraser tool	this eraser tool can be used with whatever pen you use from the WhiteBoard 4.31 software and you have deferent types

		of erasers to suit your need.
	Scratch function	with scratch you can be able to scratch the card on an screen.




## 7. Insert object function




**WhiteBoard\_4.31** support multimedia object insert.users can insert images, Texts, video, Flash, Office File, Scratch-able cover and Gif etc.

Interface of insert object tool :



Function introduce :

	Insert image	click the icon and insert image into the software, the transparency can be changed.
	Insert word	click the icon to insert word, the word can be credit color, name, size and transparency etc.
	Insert video	click the icon to insert video, with file extension ".avi"

	Insert Flash	click the icon to insert flash
	Insert office file	click the icon to insert office file and PDF file.
	Insert cover	click the icon to insert a scratch and cover a content material. user can erase the scratch by scratch eraser.




## 8.Recorder




Record function allows you to record anything you do on the board to view later anytime you like, and it includes record, Play, pause, stop, save and open video.

Interface of recorder :



Function introduction :

	Record	record the action you do with WhiteBoard_V4.31
	Play	play the record
	Pause	pause the playing

	Stop	stop record or playing
	Save record	save the video record
	Open video	open the video record and play it



## 9. Page tools






These tools handles the common operations of the pages, such as zoom in, zoom out, page up, page down, free move, move back, clean the page.

Interface of pages operation :



Functions introduction :

	zoom in	to enlarge the size of the whole page including the objects on the page
	zoom out	to reduce the size of the whole page including the objects on

		the page
	page before	display previous page
	page after	display next page
	free move	you can browse within the current page
	move back	to return to the center of the page
	clear page	delete all the page content









## 10. User Tools

There are some educational and show tools in the software which including Searchlight, Curtain, Magnifying Glass, Screen Camera, Ruler, Protractor, Compasses, Triangle Ruler, Record Tools, Video Camera, Fill Color, Dice, Math Tools.





Interface for auxiliary tools :



Function introduction :

	Search light	used to make the audience focus on a certain part of the board, so they can see part of the screen while the rest of the screen is covered. the cover's color and image can be changed. the shape can be changed into diamond, rectangle, oval, triangle and double diamond.
	Curtain	can be used to cover the content user do not want show at temporary. the color, image and size can be changed.
	Magnifying Glass	magnify the image of screen, can show a magnified area. can be magnified to different sizes.
	Screen Camera	takes a screen shot, its saved and then you can display it on a new page
	ruler	used to measure the length of object or draw a line. user can use it measure length, and draw a line by the e side of the ruler.
	Protractor	used to measure angle, drawing angle, arc and sector.
	Triangle Ruler	used to measure length
	Compasses	used to draw arc or circle
	record	used to record the action of software after clicking this icon, file



		can be saved as .avi or flash.
	Video Camera	use the computer camera to catch image or make video.
	Fill Color	click this icon can fill color to the same color area, and the colored area will be a picture area.
	dice	Random number generator, used to make random number
	Math  Tools	used to make math formula and function, it can calculate by itself, when you click the "?" icon, it will display the result. and this tool can drawing curve as the function shows.

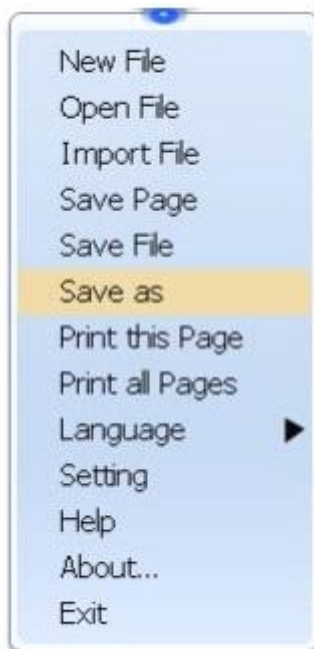
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## Introduction to main menu

### 11. Introduction to main menu

Main menu includes: New File, Open File, Import File, Save Page, Save File, Save as, Print this Page, Print all Pages, Send Email, Language, Setting, Help, About and Exit ... etc.

Interface of main menu :

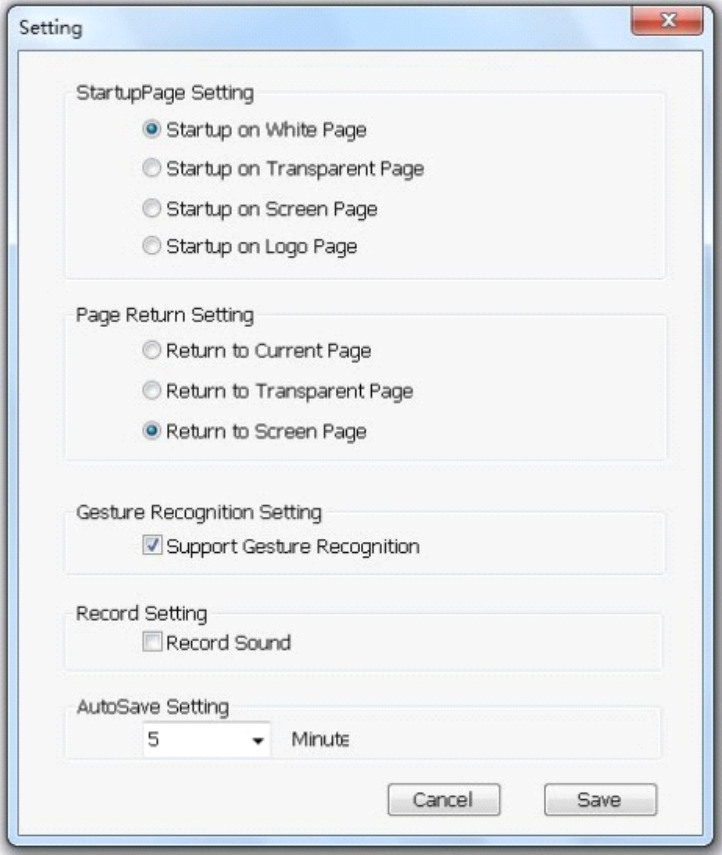


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## Main menu functions :

New page	Create a new page.
Open file	Open the file with ".draw" file extension
Import file	<p>import other files as background. this function supports the files with the following file extensions: bmp, jpg, gif, emf, png, wmf, ppt, pptx and "*. *".</p> <p>all the files can be imported directly except *.*, which need to install virtual printer first and set it as default printer.</p>
Save page	click the save icon. the page style can be saved as: bmp, jpg, gif, tif, emf, png, wmf... etc
Save file	save all the pages and objects as ( .draw ) file
Save as	click the icon save as, to specify one of the following extensions that you wish to save the page under it, file extensions are: bmp, jpg, gif, tif, png, pdf, ppt, pptx, doc, docx.
Print this page	click the icon print the current page. note: need to install your printer driver and connect the printer first.
Print all	click the icon print all the pages in the software. note: need to install

pages	your printer driver and connect the printer first.
Language	<p>setting the software operating language. the languages are are displayed in the installation catalog with the file ext.(*.Ing )</p> <p>kindly contact us so we can give you the detailed instruction on how to translate to your local language.</p>
Setting	<p>setting the basic parameters of operations, including open page setting, mouse setting, finger gesture setting, recorder setting, save automatically setting etc.</p> <p>interface of setting</p>

	
Help	open help file, find help information
About	display the software version information
Exit	exit the software

## 12.Right Menu

It includes: Copy, Cut, Paste, Clone, Lock, Delete, Rotate, Combine, Cancel Combine,

Layer Sequence, Add to Gallery, Mirror, Flip, Drag Copy, Hyperlink, Animation.

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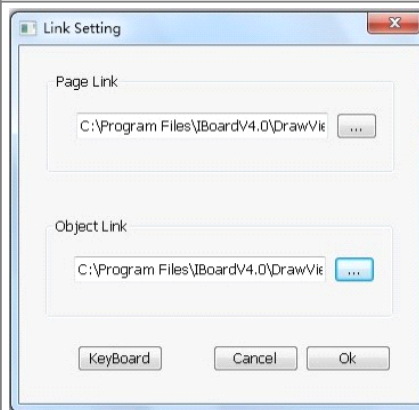
Interface of right menu :

Copy	
Cut	
Paste	
Clone	
Lock	
Delete	
Rotate	▶
Combine	▶
Layer Sequence	▶
Flip	▶
Mirror	▶
Drag Copy	
Hyperlink	
Animation	

Function introduction :

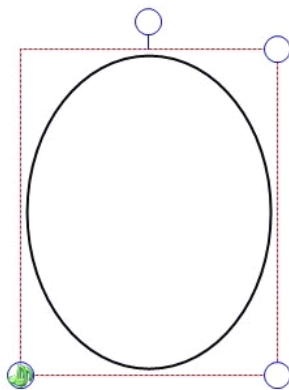
Copy	copy selected objects, work together with paste
Cut	cut selected objects, work together with paste
Paste	paste copy or cut objects, can paste to different page
Clone	copy and paste selected objects

Lock	lock selected objects, object which is locked can not be moved, zoom in or out, remote or delete
Delete	delete selected objects
Rotate	Rotate45, Rotate90, Rotate180, Rotate270,
Combine	combine all the objects selected. you can also cancel the combine.
Layer order	setting the order of layers, setting the display order of object.
Flip	Flip the objects, including level Flip and vertically Flip.
Mirror	create mirror image for select objects, including level image and vertical image.
Drag Copy	click this icon, drag an object on the page, will copy a new one in the place you release the object. it's quick copy way.
Hyperlink	link pages or objects.  interface for links:



as the below picture, there will be a music icon on the northeast corner on the page; for link figures, there will be a music icon on the upper right corner of your screen.click the music icon can open the link file.

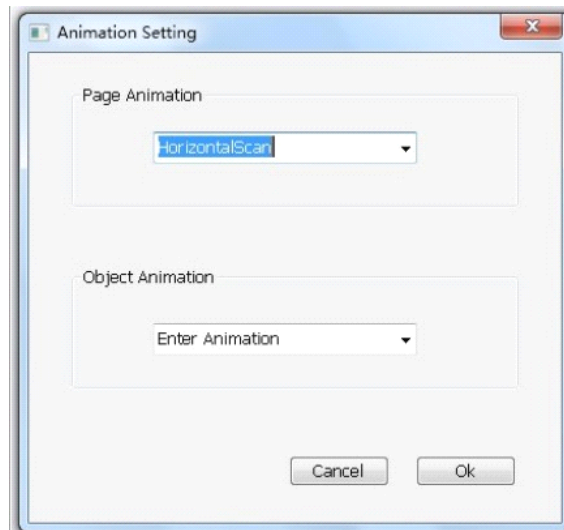
1 / 1





setting page switching animation and select object animation.

interface for animation



Animation

there will be a icon on the upper right of the screen to play the animation when there is animation. click the icon can open the animation.

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## 13. Format and Styles

The format and styles including color setting, transparency setting, width setting, style and cap setting.

Interface for format and styles color setting :



Pen color is for the pens: you have many options for the pen colors to choose from

background color is for the page color or object fill color.

Interface for transparency setting :



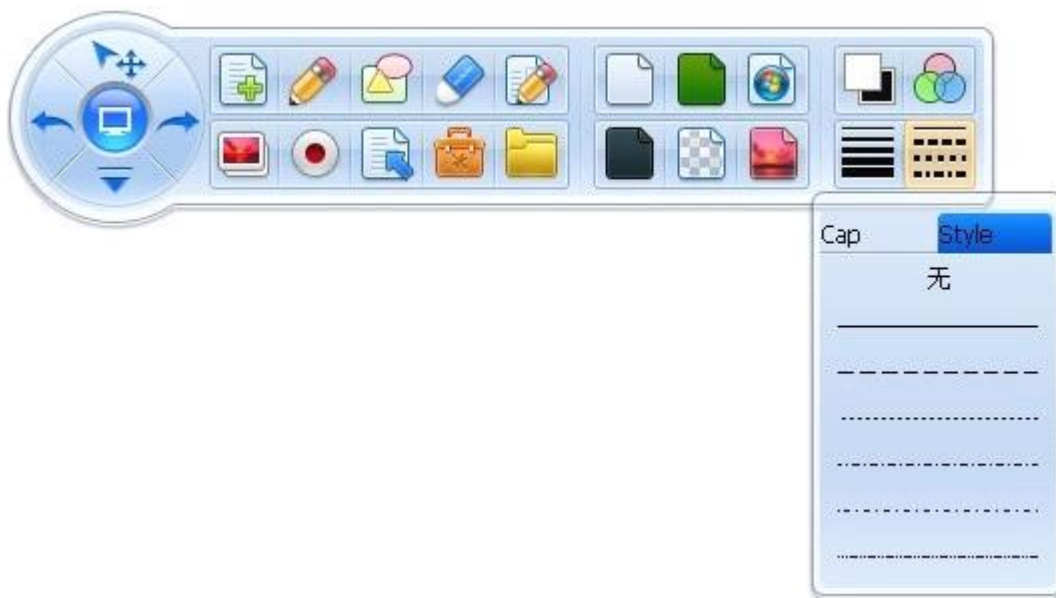
Setting the transparency of object and pages.

Interface of line width setting :



Width setting only work on selected objects and current line.

Interface for lines style setting :

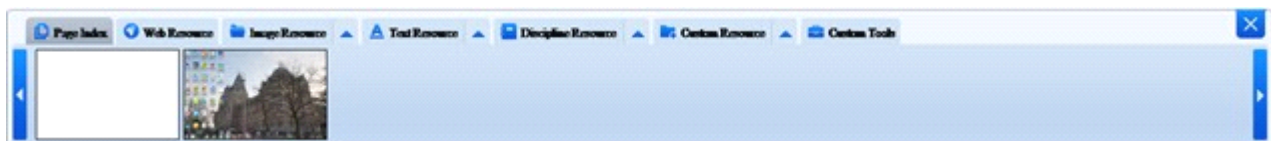


This function only work on pencil and straight line. when there is no other select object, it works on the current line.

#### 14. Resources list

The resources are designed for education. they includes Web Resource, Image Resource, Text Resource, Customized Resource, Customize Tools and you you have also "Add Resource" function.

Interface for resources list :



Functions introduction :

Pages	click this icon, you can see all Thumbnails of pages created. Each thumbnails has a delete button, click the button can delete it
Web Resource	click this icon you can see all links in the web resource folder. (.url)  path of web resource : WhiteBoardV4.31\DrawView\ResLib.  how to add web resource : right click on the webpage, choose "save as", then create a (.url) file, copy the url file into the web resource folder, then you can see the web resource in the software. click the link file, you can open the website.
image	click the icon, you can see all the images in the image resource folder.

resource	<p>path of image resource folder: installation catalog\ResLib\PicLib.</p> <p>how to add image resource: create a new folder under the image resource folder, copy the image resource in the new folder. open the image resource, click the triangle to sort the resource you add. the catalog name is the new folder name.</p>
Text Resource	<p>click this icon, it includes all the (.txt)files in the text folder.</p> <p>path of text resource: installation catalog\ResLib\TextRes.</p> <p>how to add text resource : create a new folder under the text resource folder, copy the text resource in the new folder. open the text resource, click the triangle to sort the resource you add the catalog name is the new folder name.</p>

<p>Discipline Resource</p>	<p>click this icon, it has the common figures of different subjects.</p> <p>path of discipline resource: installation catalog\ResLib\VirtualClassRes.</p> <p>how to add discipline resource : create a (.dat) file under the discipline resource folder.</p> <p>how to open the discipline resource: click the icon, there is a triangle for sorting of the discipline. select the sort you want, it will show the figures it has. click the figure on the software page and drag it into the resource panel, it will be saved.</p>	
<p>Custom Resource</p>	<p>click this icon, it includes resources that user add.</p> <p>path of custom resource : installation catalog\ResLib\CustomRes.</p> <p>how to add discipline resource : create a (.dat) file under the custom resource folder.</p> <p>how to open the custom resource: click the icon, there is a triangle for sorting of the custom. select the sort you want, it will show the figures it has. click the figure on the software page and drag it into</p>	

	the resource panel, it will be saved.
Custom Tools	<p>click this icon, it includes all application resource in the folder.</p> <p>path of custom tools : installation catalog\ResLib\AuxiliaryToolsRes</p> <p>how to add custom tools : copy the tool into the custom resource</p> <p>folder. the style of file should be ( .exe ) or hotkey (.lnk).</p>

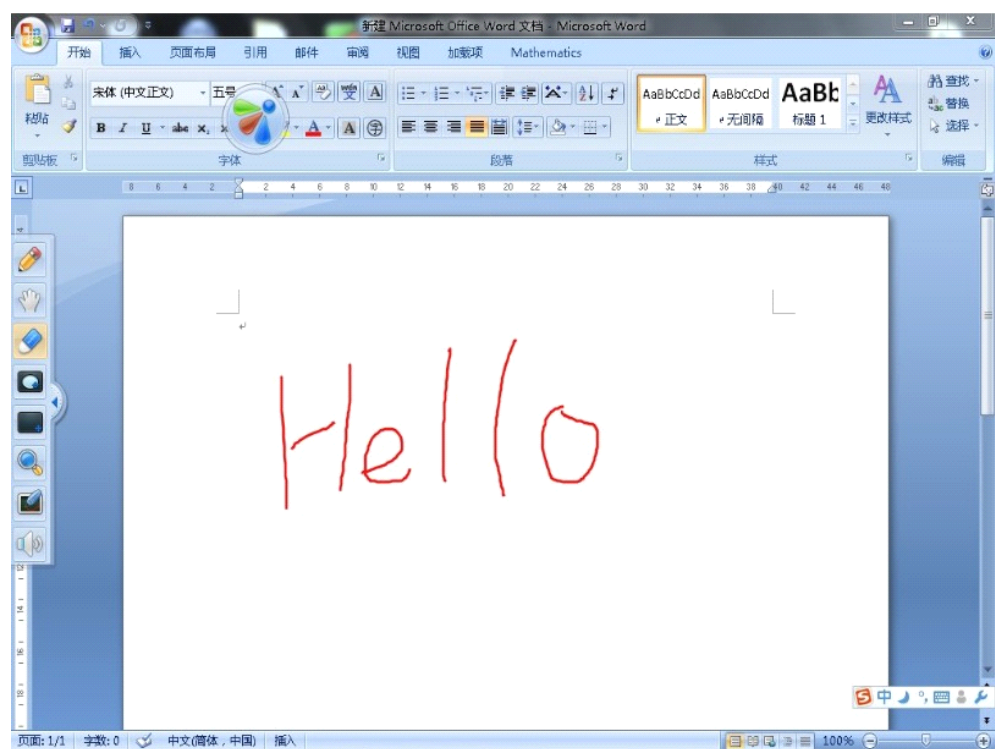
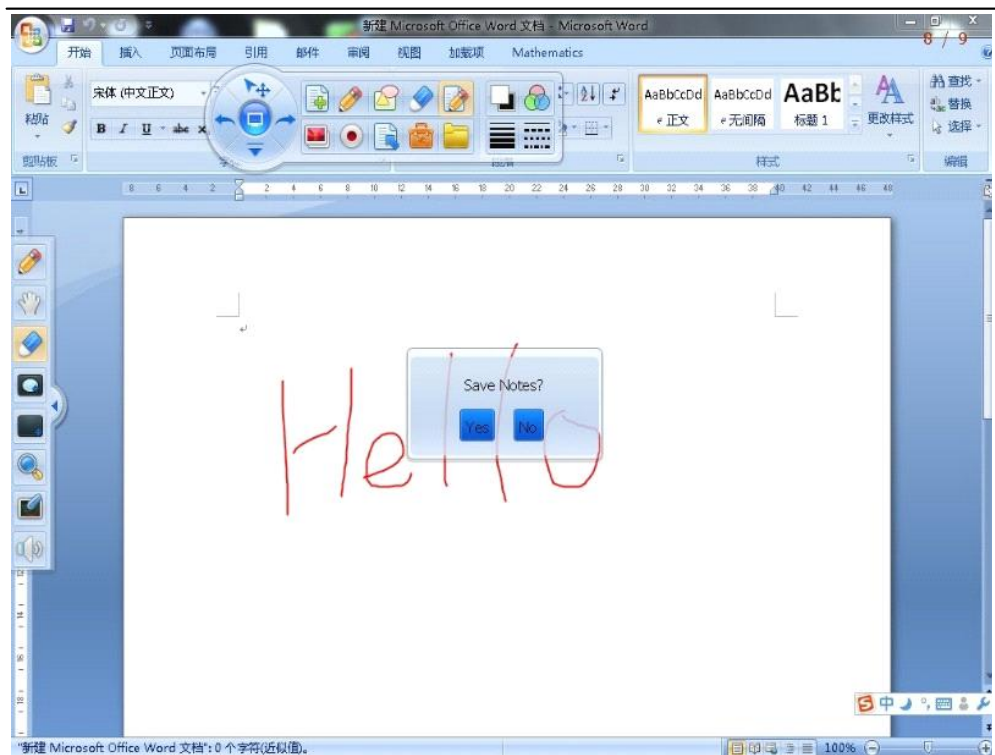
## 15.Word and Excel notes

Word and Excel notes function can allow you to make notes in word or excel files and save the file with the notes as images. by using the following writing tools: the pencil, the soft pen and highlight pen tools to make note in office files.

To make a note: open an MSOffice file first, create a screen page or transparent page using WhiteBoard\_V4.31, then click pencil or soft pen or highlight pen tool to make note for the file. When finish making the note, click "save as", there will be a save box, click yes, then save the note to word or excel.

See the picture as follows:











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## 16. Other functions

There are some common functions in the software, such as select ,undo, redo, Move Back, reader, handwriting.

Introduction :

	screen	move back to the computer screen, then you can still use the interactive area instead of the mouse
	handwriting	please install MyScript Stylus first, or any hand writing recognition software then you can start hand writing recognition function directly on the board.
	select	click this icon then choose any object by your hand to use it any way you like.
	undo	cancel last step, max for 20 steps
	redo	to recover the cancel
	reader	you can listen to any word from the resources, or even the words you write any where on the board using a third party writing software.

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## 17.Introduction of Customized Shortcut Bar (CSB)

CSB can help user work easier. There are some default common icons which users often refer to, and also user can add any other icon in the main menu to the CSB list.

Meanwhile, user is free to change the location of the CSB; simply by move it to left or right.

Interface for CSB :



main menu you can chose any icon from the main menu and add it to the CSB.

You can also remove any icon from the CSB.

## 1. Adding an icon

To add an icon, simply drag the icon from the main menu to the CSB



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## 2. Deleting an icon

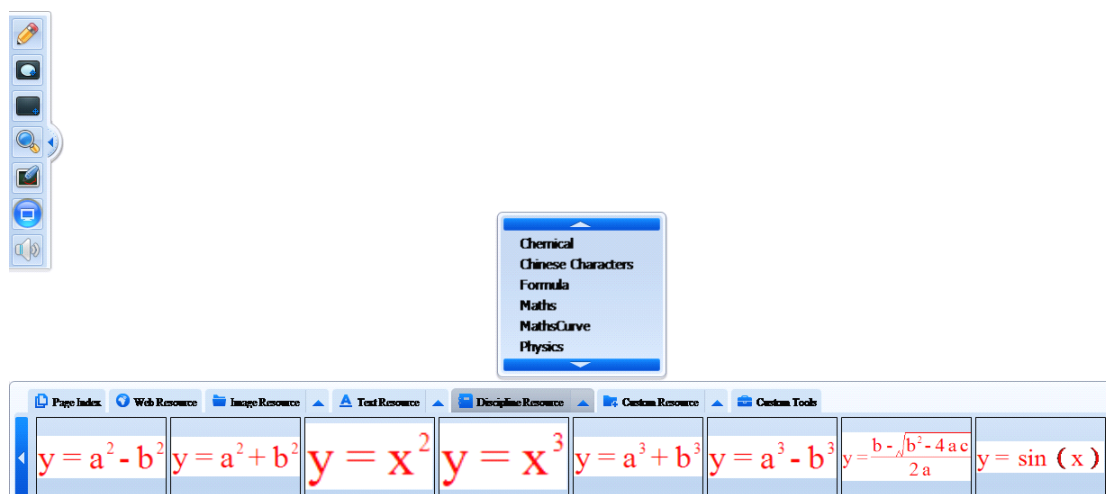
To delete an icon, simply drag away the icon from the CSB



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## Mathematical Resources:

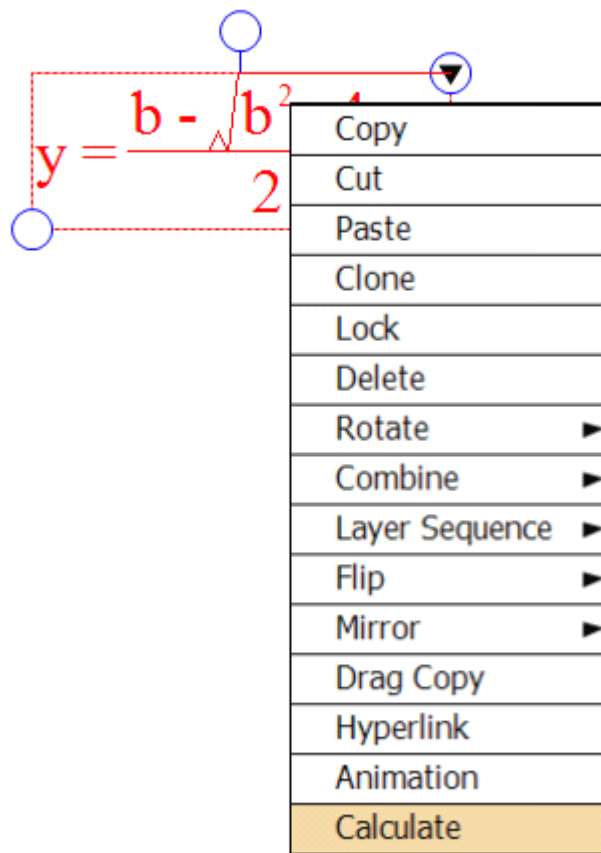
1、mathematical formula: Multi-educational resources includes primary school, Secondary school mathematical formula and can be calculated without the standard showing up from the computer screen. Operation ways below:



As above, choose from folder multi-educational resources mathematical axiom, then you will see all the different axioms. Then choose it and drag on the page, as photo below:

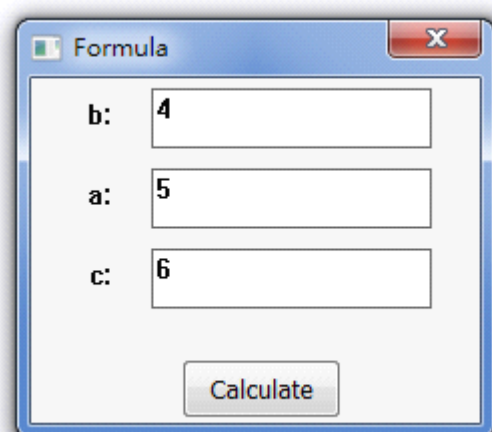
A close-up of the quadratic formula from the software interface, showing the equation  $y = \frac{b - \sqrt{b^2 - 4ac}}{2a}$  in red text on a light blue background.

The objects can be calculated from your typing data. Such as below:



Type Numbers:

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A screenshot of a 'Formula' dialog box. It has a title bar with a green icon, the word 'Formula', and a red close button. Inside, there are three input fields: 'b:' with the value '4', 'a:' with the value '5', and 'c:' with the value '6'. At the bottom is a 'Calculate' button.

Formula

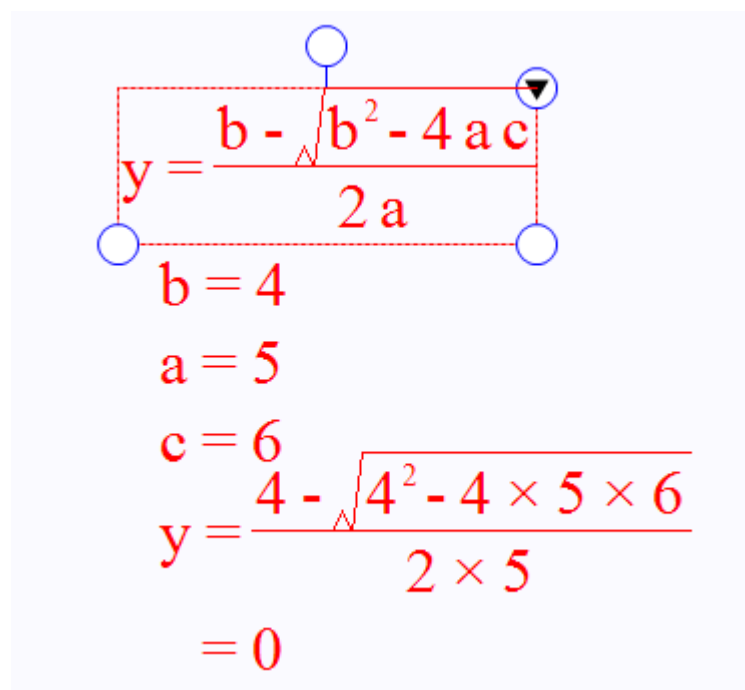
b: 4

a: 5

c: 6

Calculate

Click Calculate:

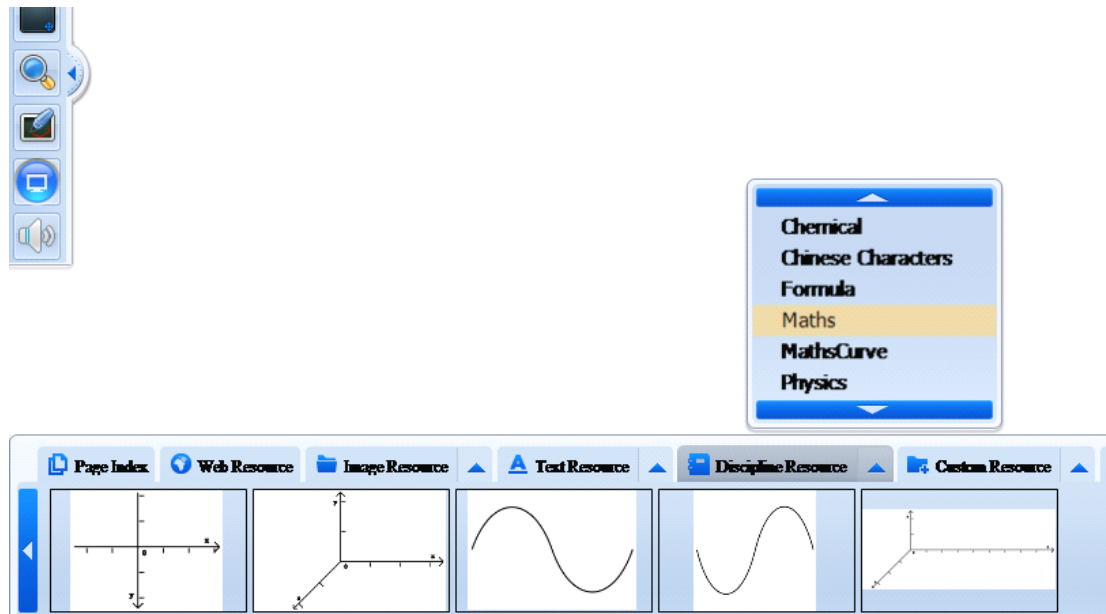
A diagram showing the quadratic formula with red dashed lines and blue circles indicating the parts to be substituted. The formula is  $y = \frac{b \pm \sqrt{b^2 - 4ac}}{2a}$ . Below it, the values  $b=4$ ,  $a=5$ , and  $c=6$  are listed. Then, the formula is substituted with these values:  $y = \frac{4 \pm \sqrt{4^2 - 4 \times 5 \times 6}}{2 \times 5}$ , which simplifies to  $= 0$ .
$$y = \frac{b \pm \sqrt{b^2 - 4ac}}{2a}$$
$$b = 4$$
$$a = 5$$
$$c = 6$$
$$y = \frac{4 \pm \sqrt{4^2 - 4 \times 5 \times 6}}{2 \times 5}$$
$$= 0$$



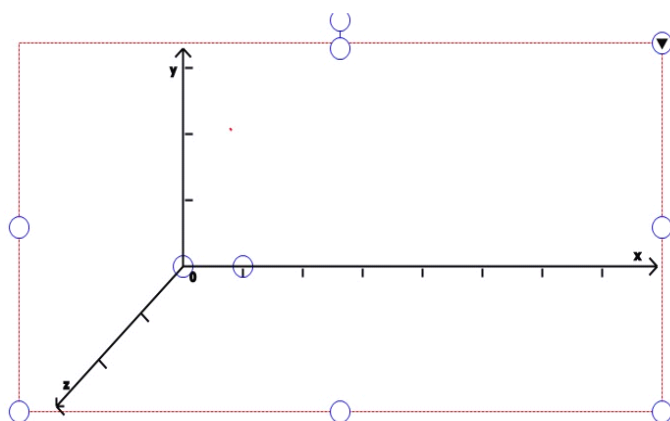
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2、Math figures, you can find some basical math figures such as two dimension coordinate, three-dimensional coordinate, sine curve, cosine curve, etc. Operation way is

below:



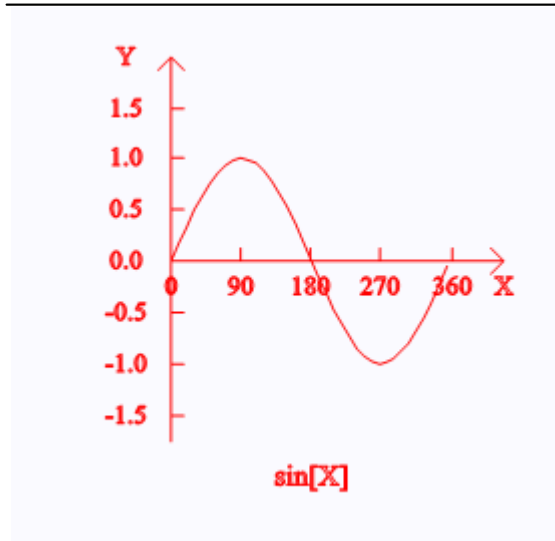
As above, choose the figure from the resources and drag on the page and edit it.



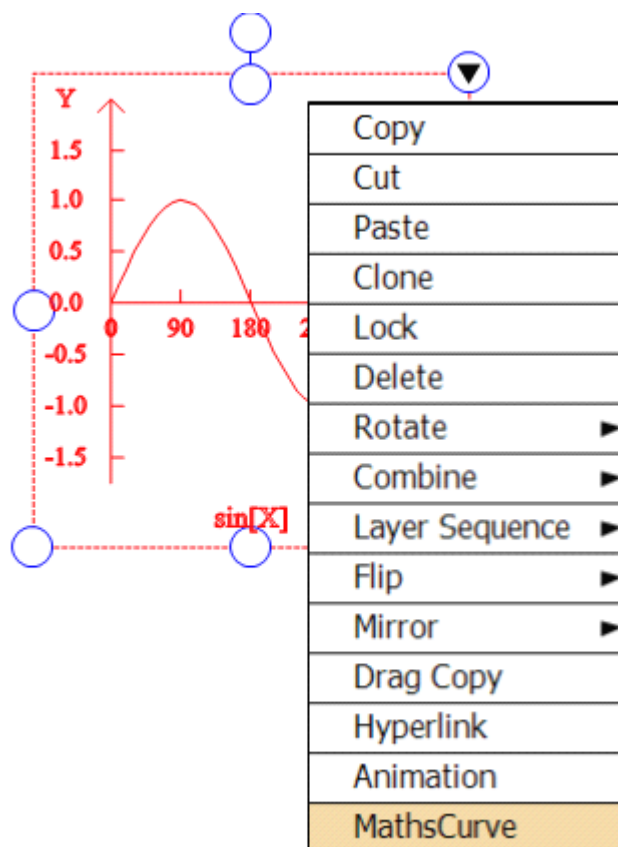
### 3、Math Function figures:

The interface includes a sidebar on the left with icons for a document, a monitor, and a speaker. A central menu lists categories: Chemical, Chinese Characters, Formula, Maths, MathsCurve (highlighted), and Physics. Below this is a toolbar with tabs for Page Index, Web Resource, Image Resource, Text Resource, Discipline Resource, and Custom Resource. At the bottom, a row of five graphs is displayed:  $\sin(x)$ ,  $\cos(x)$ ,  $\sin(x/2)$ ,  $\cos(x/2)$ , and a linear graph  $y=x$ .

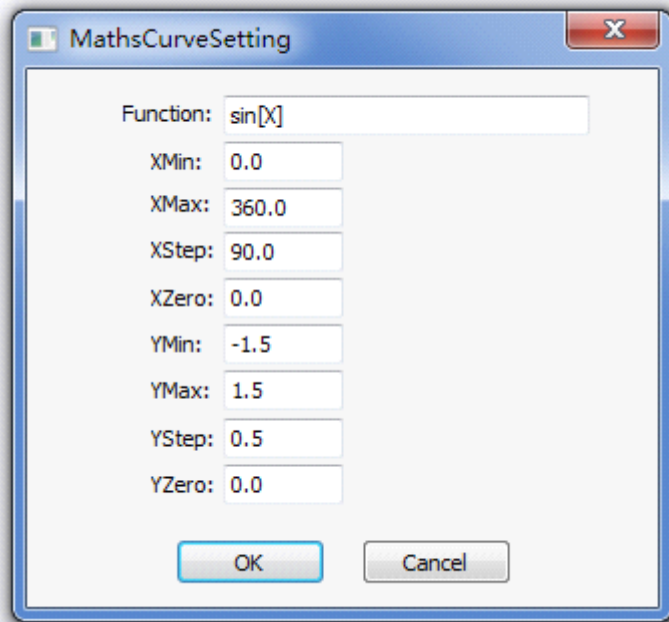
As above, choose the figure from the resources and drag on the page and edit it.



Right mouse function to edit :



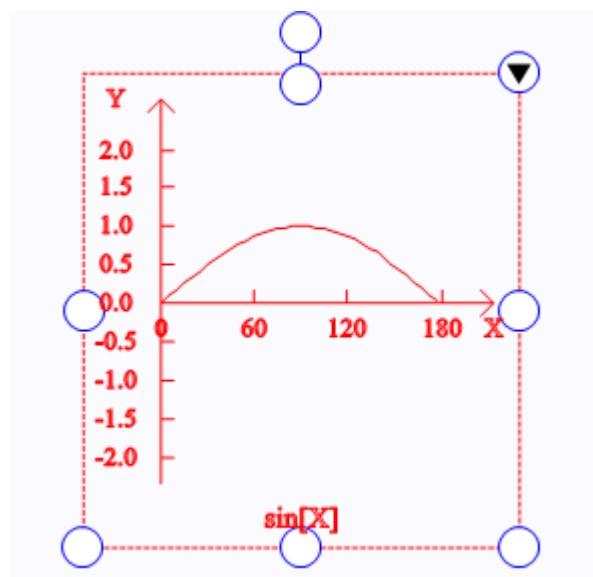
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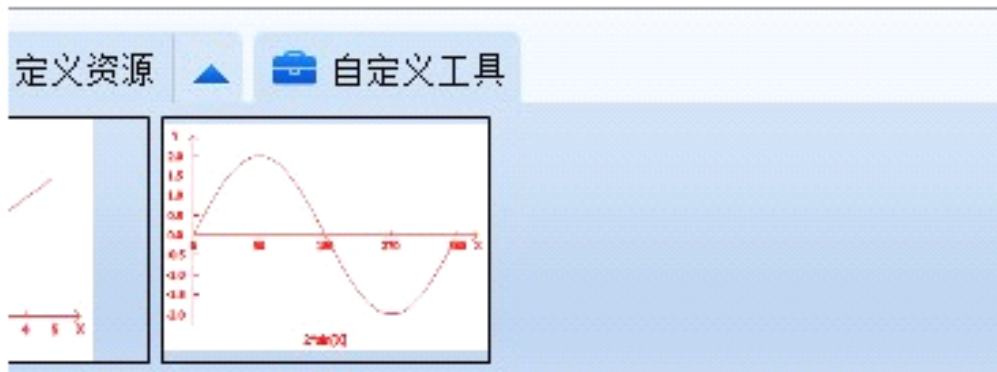
A screenshot of a software dialog box titled "MathsCurveSetting". It contains several input fields for configuring a function plot. The "Function:" field is set to "sin[X]". The X-axis parameters are: XMin: 0.0, XMax: 360.0, XStep: 90.0, and XZero: 0.0. The Y-axis parameters are: YMin: -1.5, YMax: 1.5, YStep: 0.5, and YZero: 0.0. At the bottom are "OK" and "Cancel" buttons.

Parameter	Value
Function:	sin[X]
XMin:	0.0
XMax:	360.0
XStep:	90.0
XZero:	0.0
YMin:	-1.5
YMax:	1.5
YStep:	0.5
YZero:	0.0

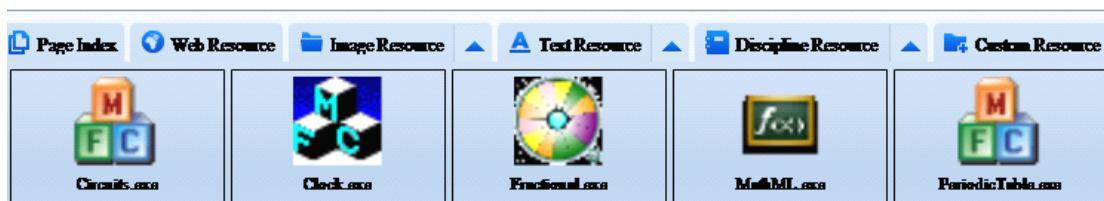
Set up new numbers for X , Y, 0 then can get new function figure.



As below, the new figure we can drag into the customized tool. When you use next time just drag on the page, no need to do the new one.

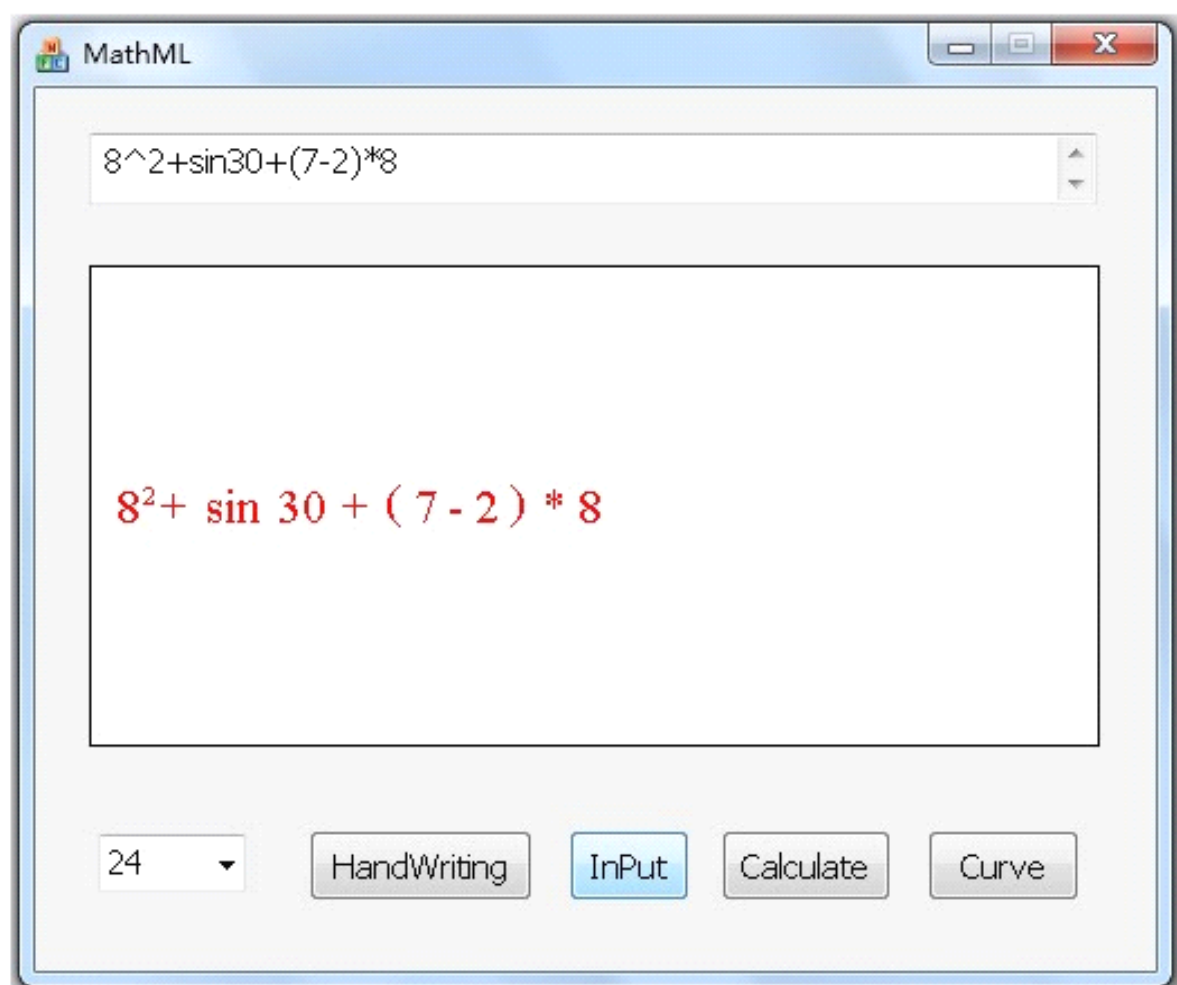


#### 4、Math Tool

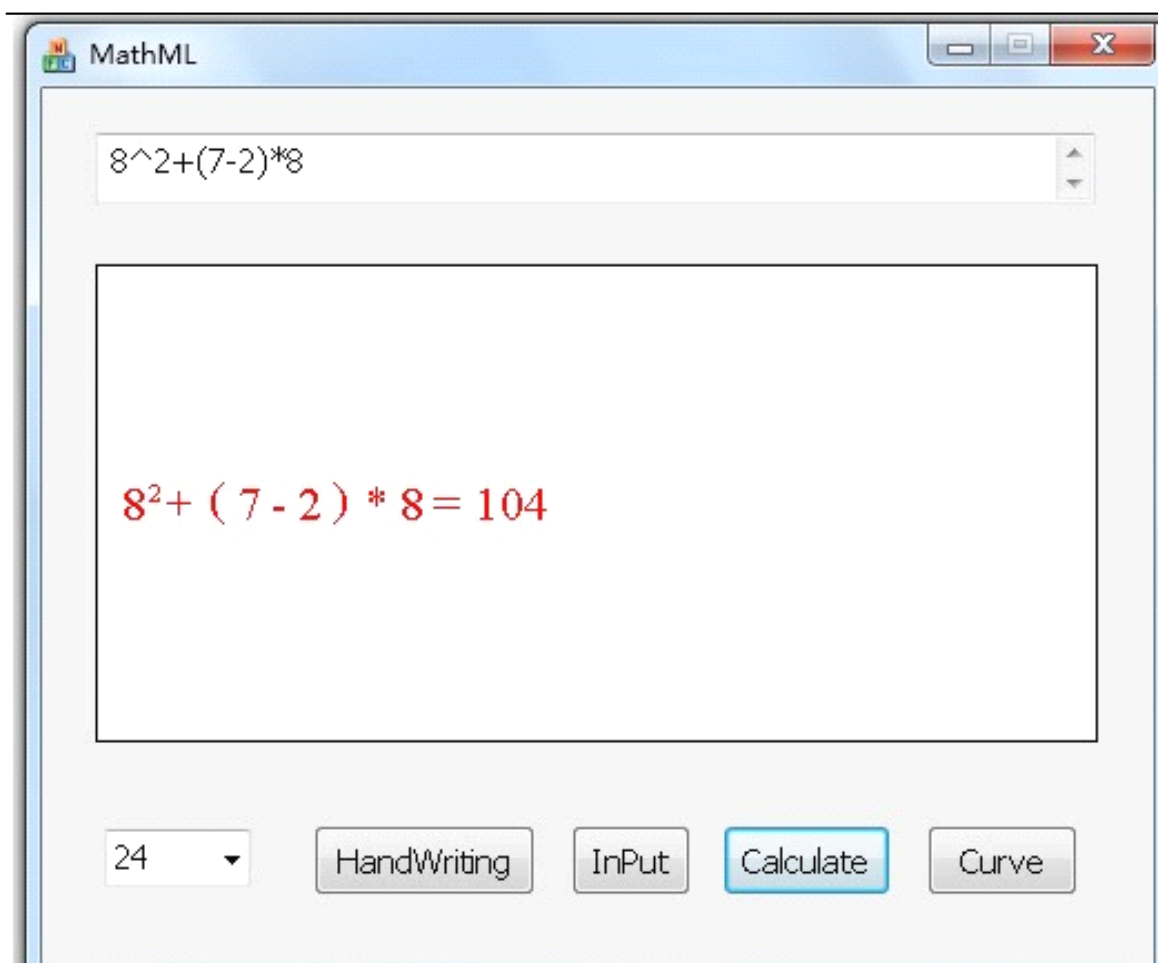


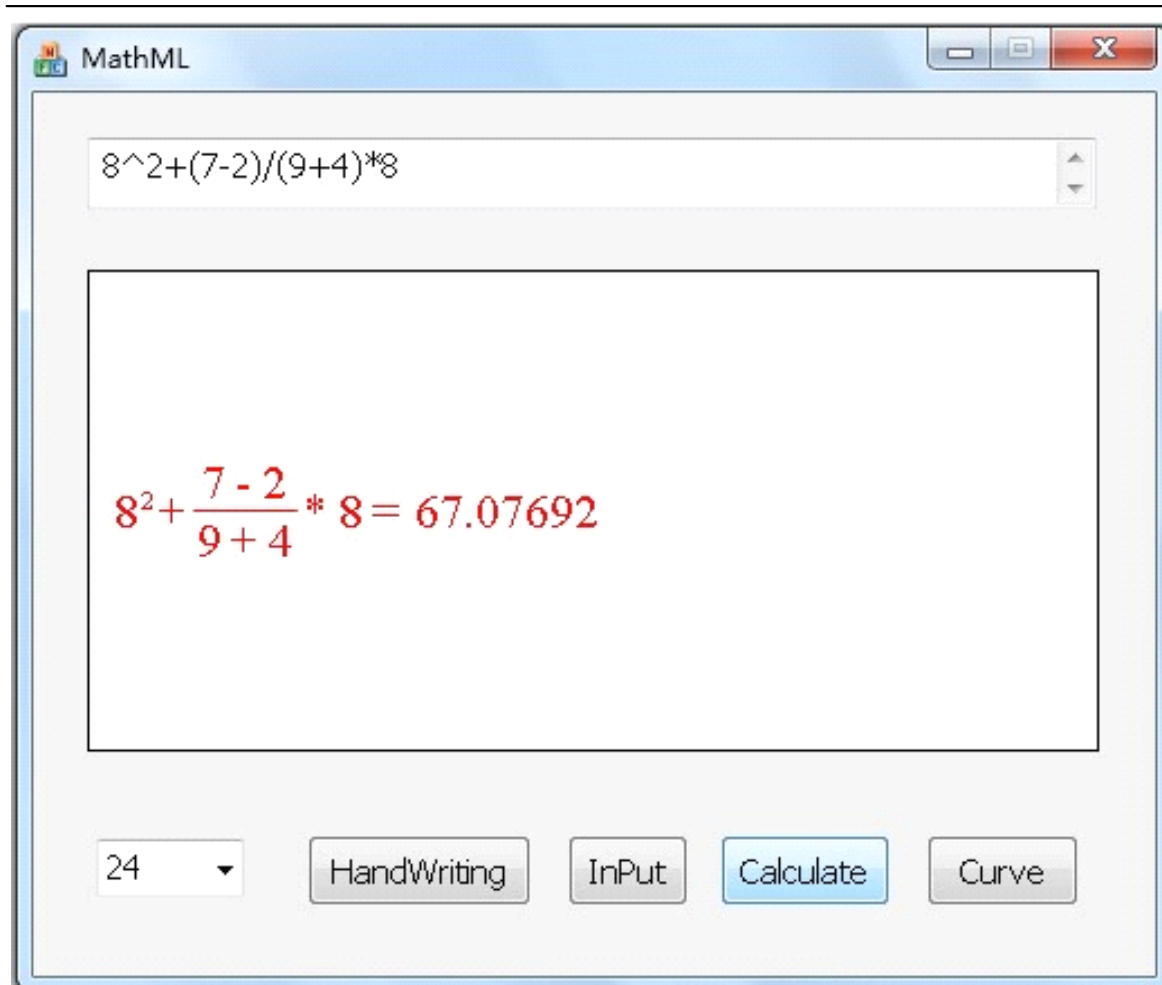
Choose customized resources math tool and open the tool software

MATHML, then you will get the functions below. Type a formula and click input then you will see the formula from the frame below.



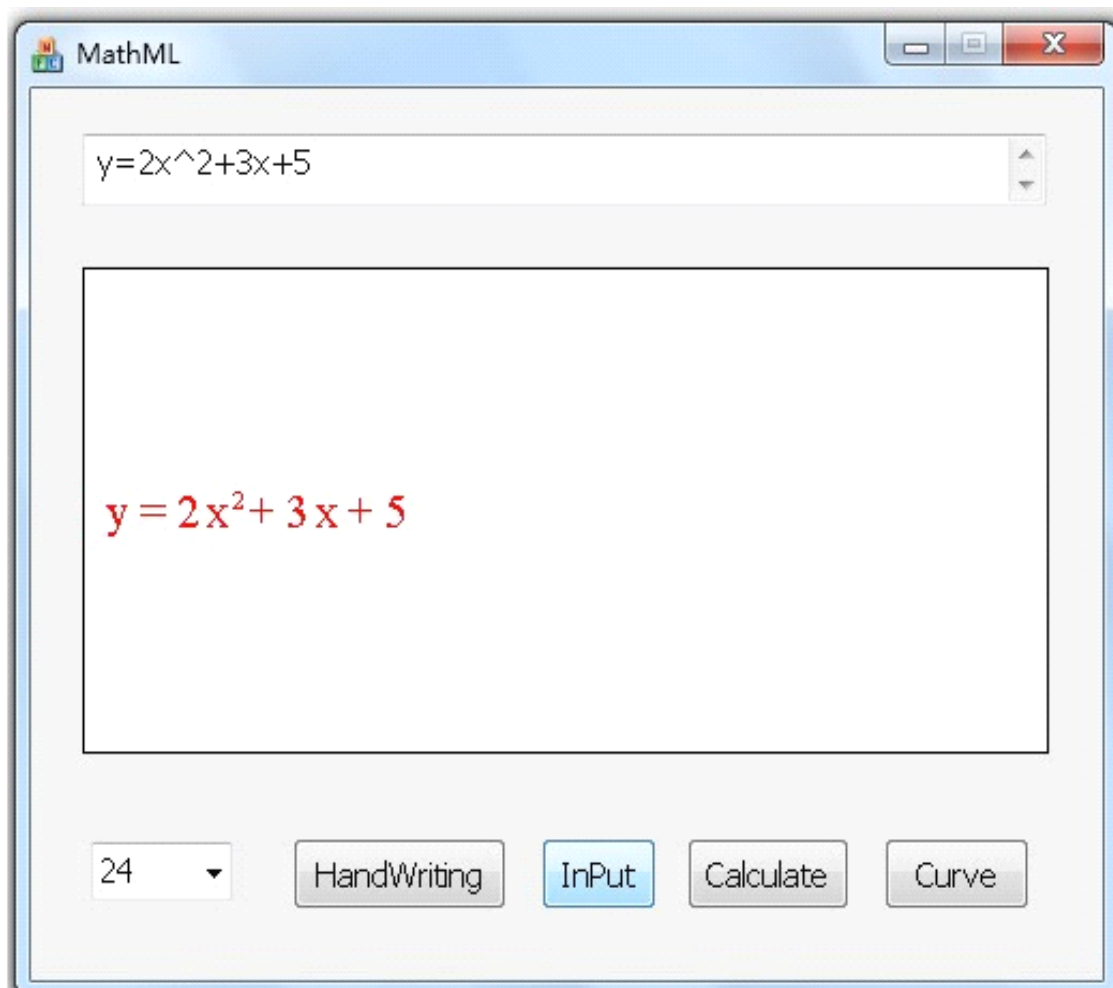
After calculated, as photos below, click input, then click calculate, then you will get the result.



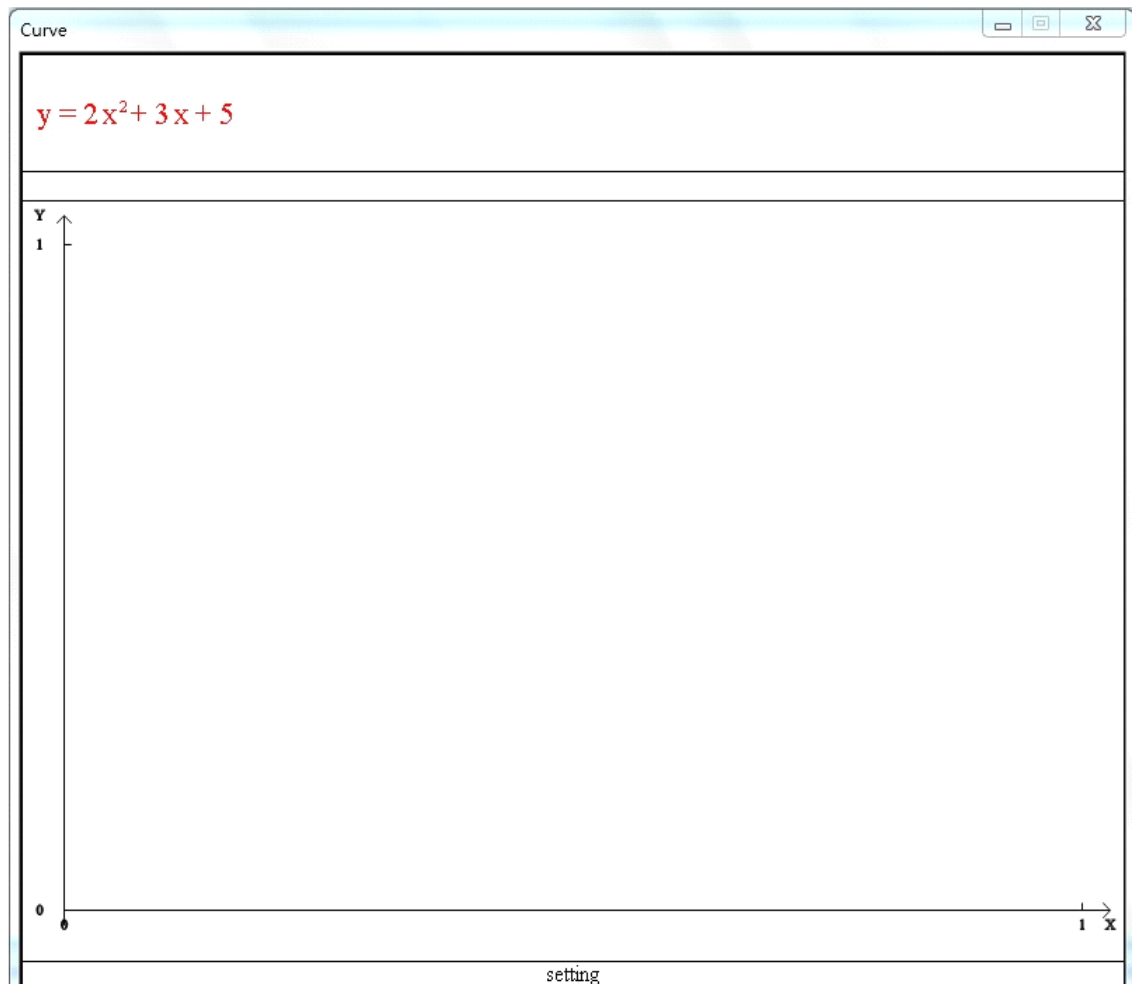




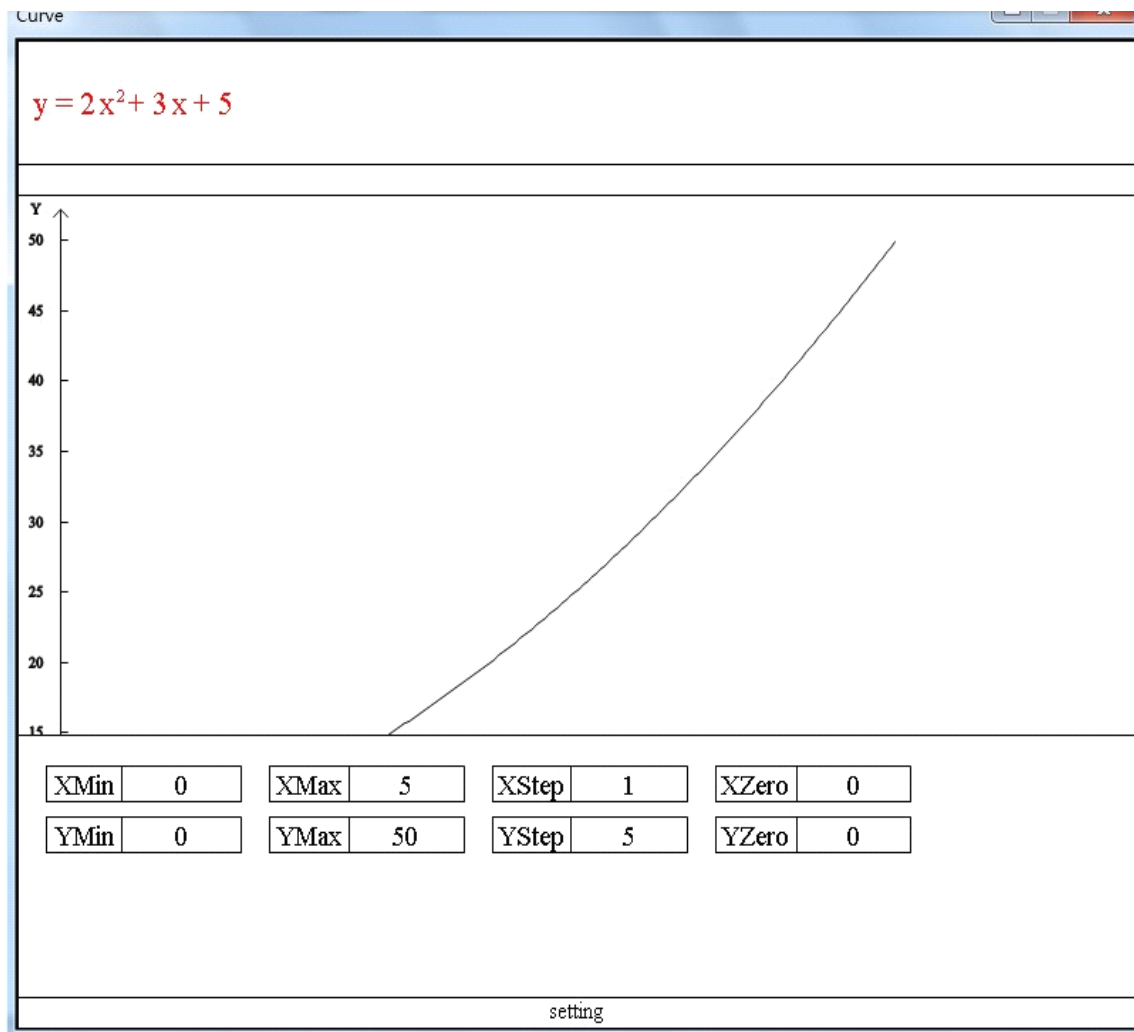
Function figure displayed function:



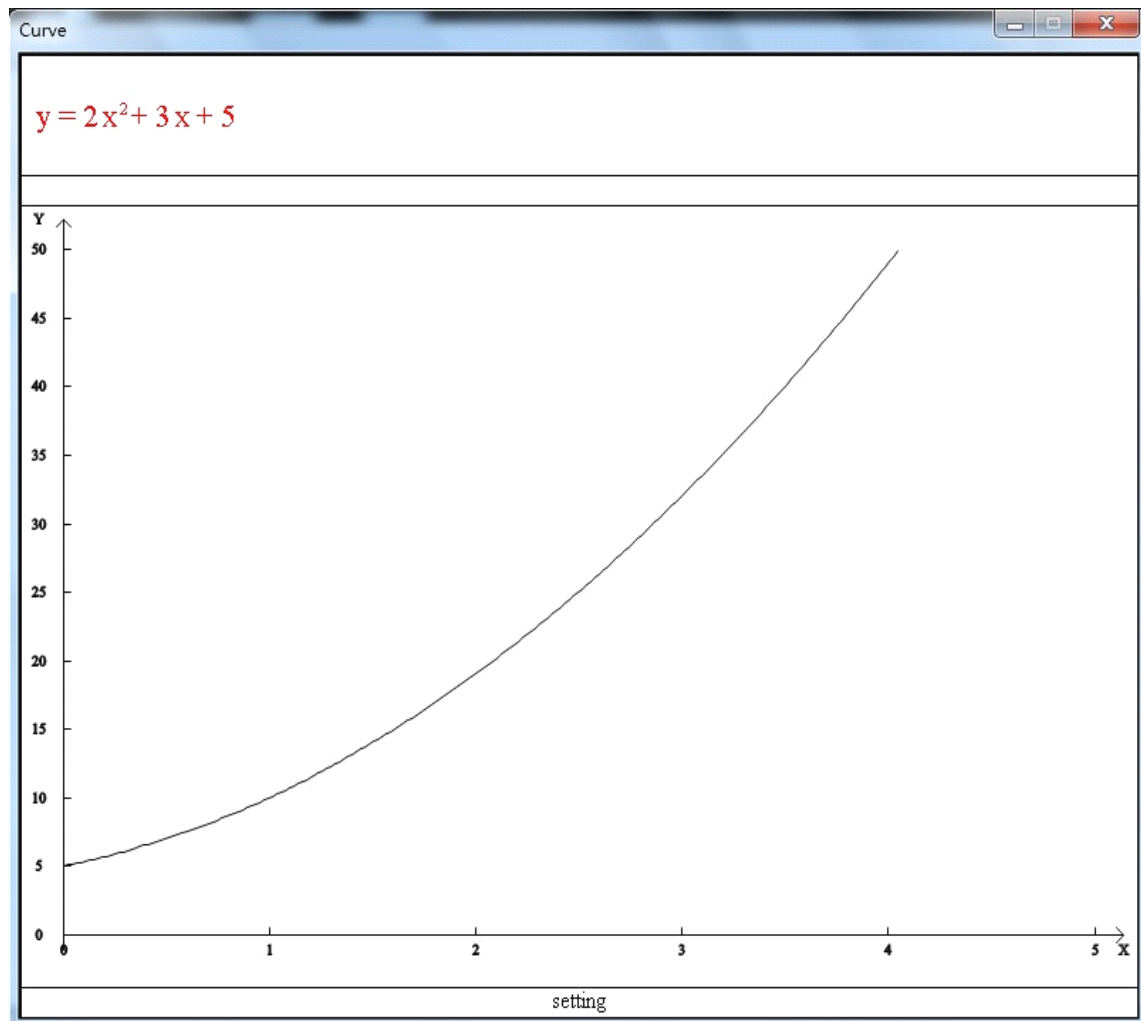
Type function figure and click input, then click curve then you will see the figure desktop.



Click setting, set up the new numbers for X range, Y range, 0 etc.



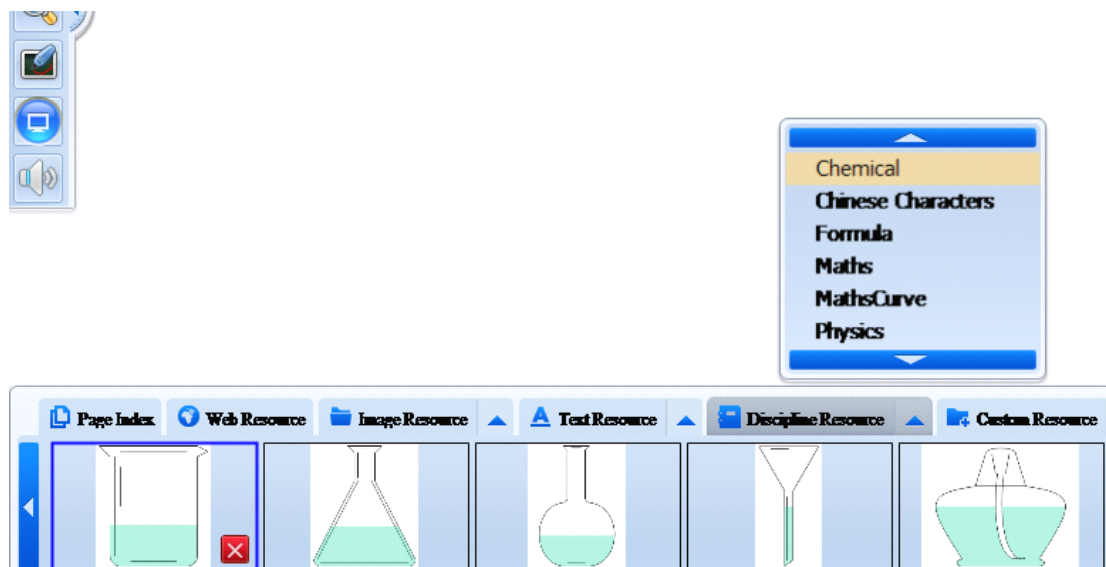
The result is below :



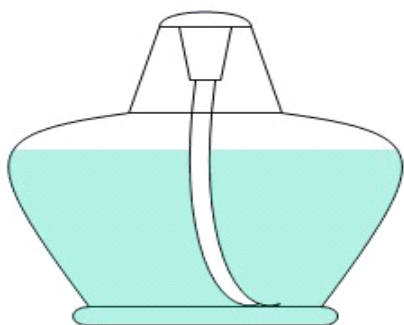
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## Chemical Resources:

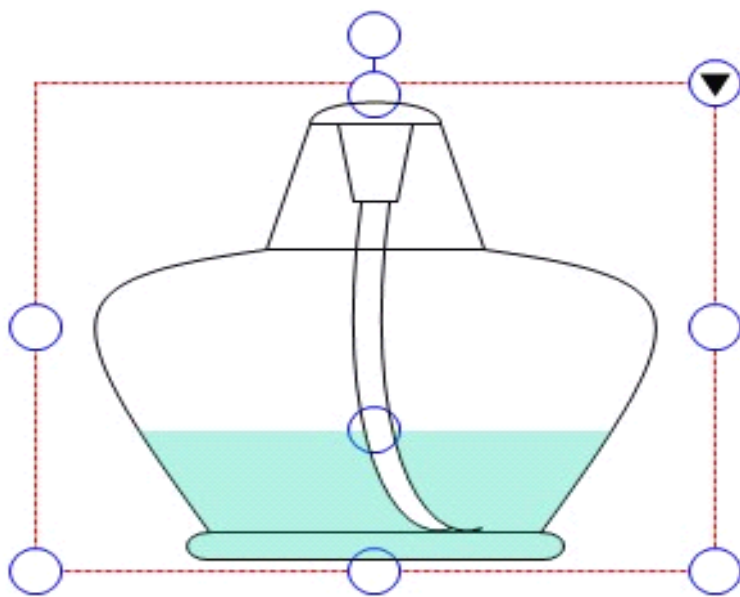
1、 We put some chemical tool and instruments in this folder. Operations are below:



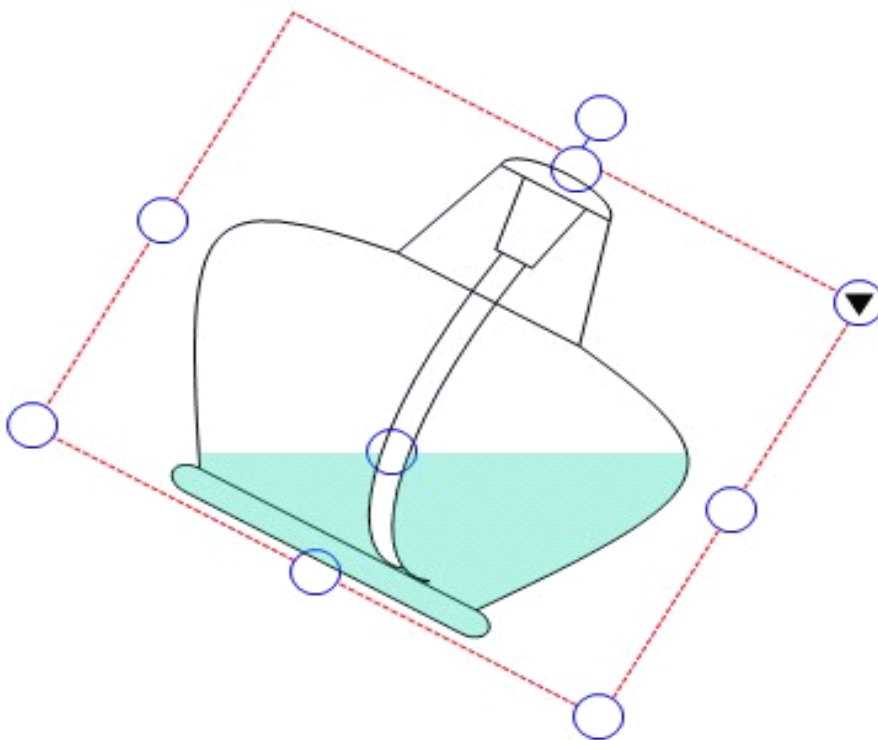
As above, choose chemical then you will get the resources and drag on the page to edit.



You can set up any height for this tool.

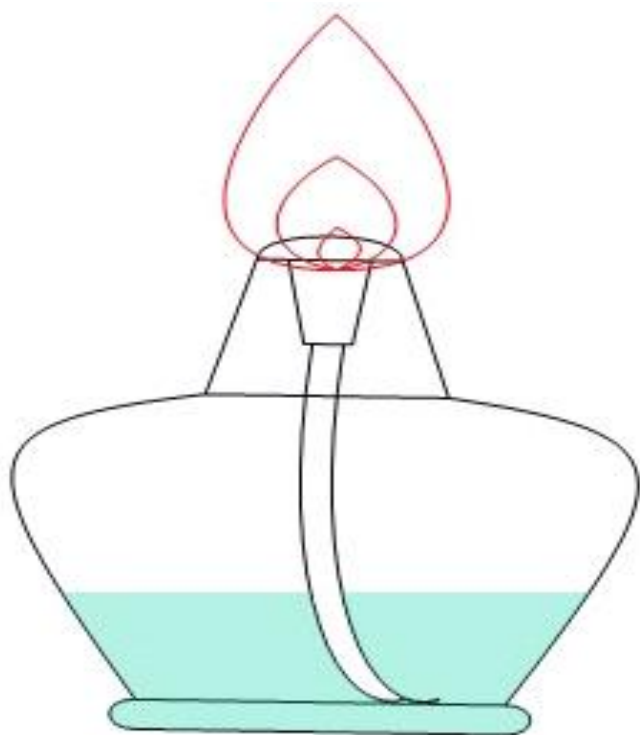


When you rotate this chemical tool, the liquid surface will be horizontal.



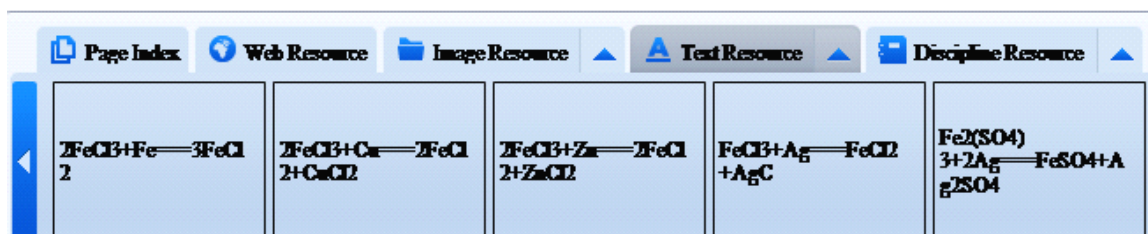
---

It can be combined with other figures to make the chemical test.

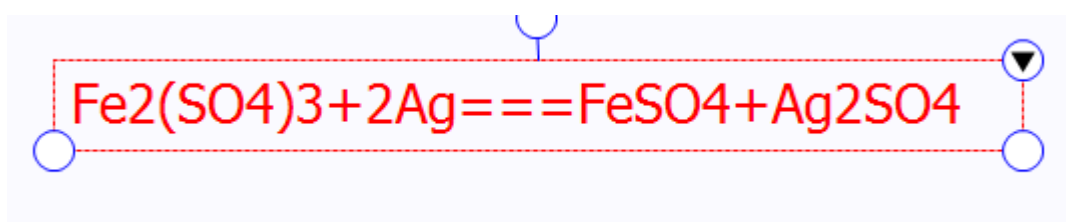


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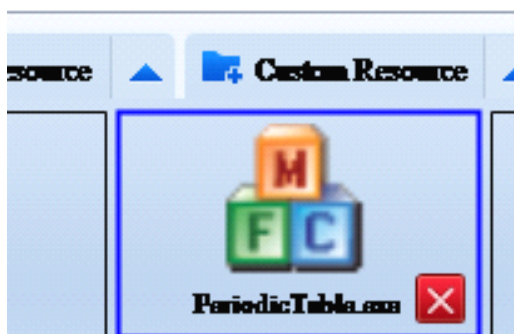
## 2、Chemical equation for Secondary and Senior Schools .



As above photo, choose different chemical equation, and right mouse to choose Phoneticize and you will get below:



## 3、periodic table of elements







Choose any one of the element, then you will see the information below.

钠

元素符号: Na  
原子序数: 11

英文名称: Sodium  
相对原子质量: 22.989768

原子半径/Å: 2.23  
共价半径/Å: 1.54  
离子半径/Å: 1.02

原子体积/cm<sup>3</sup>/mol: 23.7  
电子构型: 1S<sup>2</sup>2S<sup>2</sup>2P<sup>6</sup>3S<sup>1</sup>  
氧化态: 1



由电解氯化钠、硼砂和冰晶石而得。

用在医药、农业和摄影等方面，也用于制造路灯、电池和玻璃等。

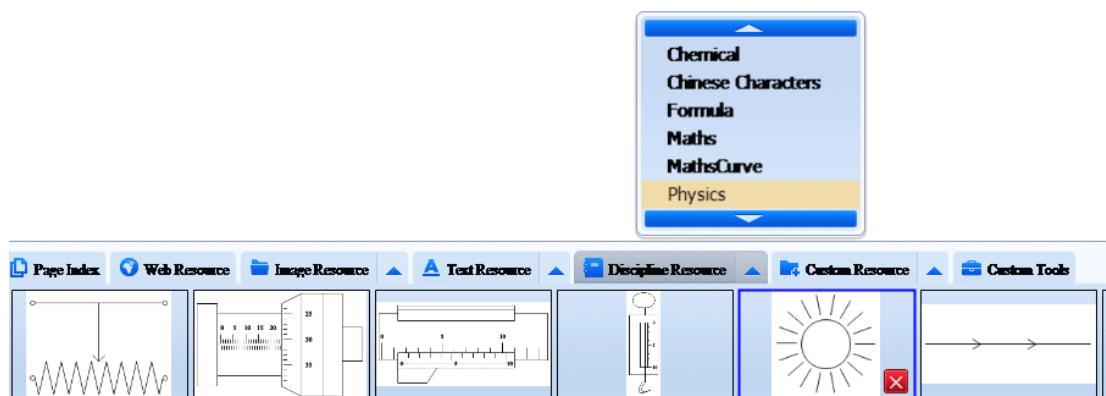
状态: 软质的银白色碱性金属。

熔点(°C): 98	沸点(°C): 883
密度 (g/L/273K,26atm) :0.971	比热/J/gK: 1.23
蒸发热/KJ/mol: 96.96	熔化热/KJ/mol: 2.598
导电率/10 <sup>6</sup> /cm: 0.21	导热系数/W/cmK: 1.41

There are some Chinese words inside. Also you can download the same format from internet and put inside of this folder and use it.

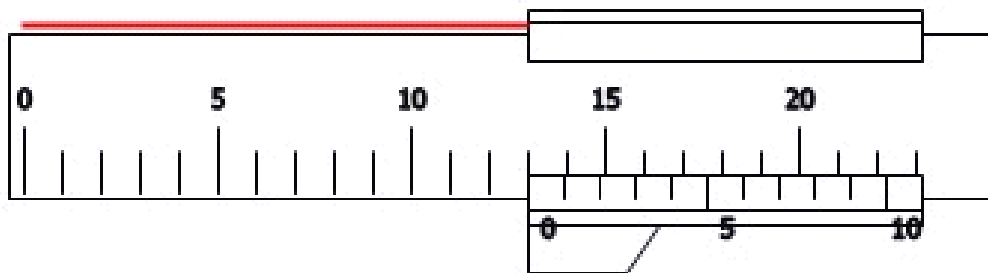
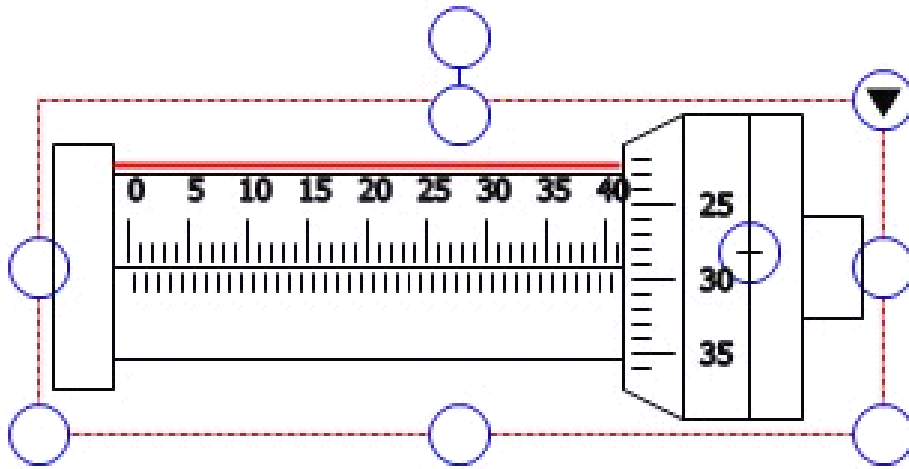
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## Physical tools



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As above, choose Physics and drag on the page and operate it.



Above photo operation is the same with material object.

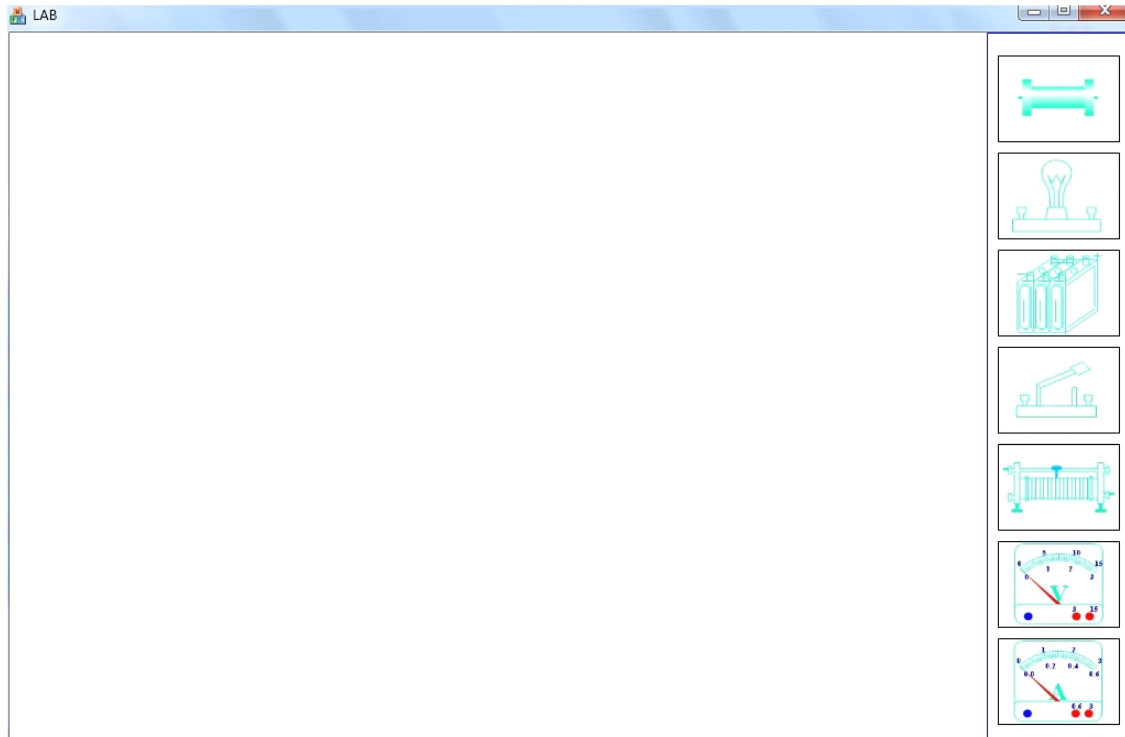
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## 2、Physics CKT test platform



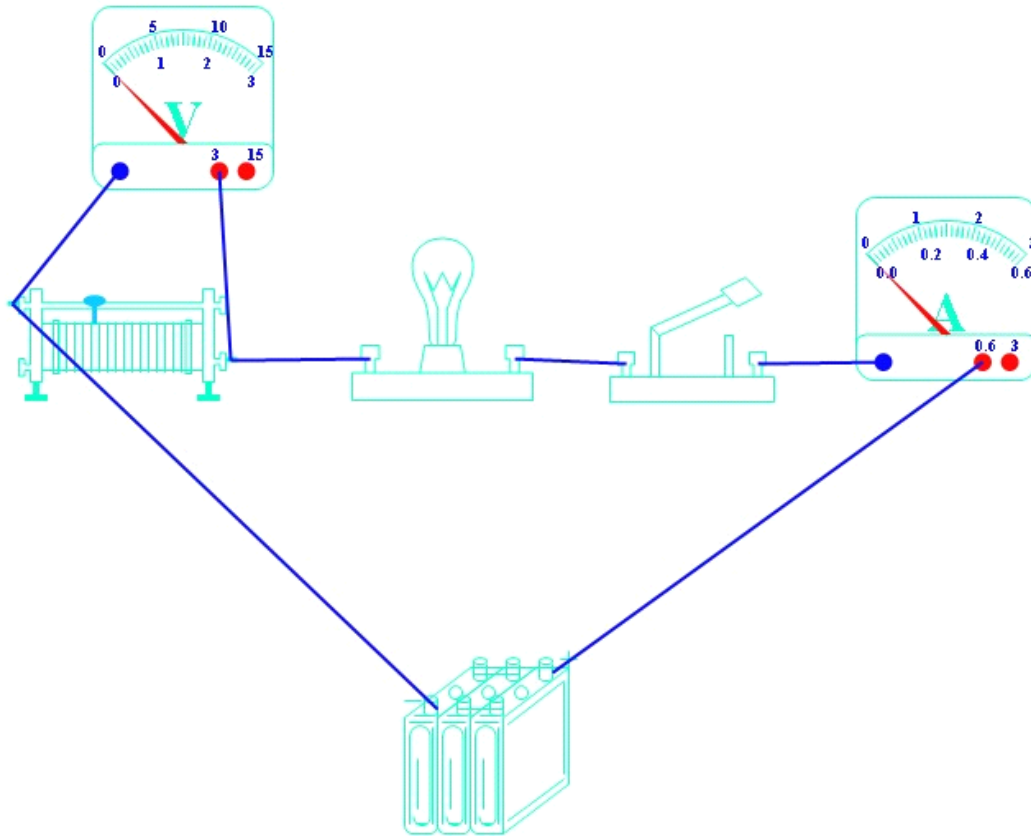
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As above photo to choose CKT test, this software is to imitate CKT test software, open it and you will see below:

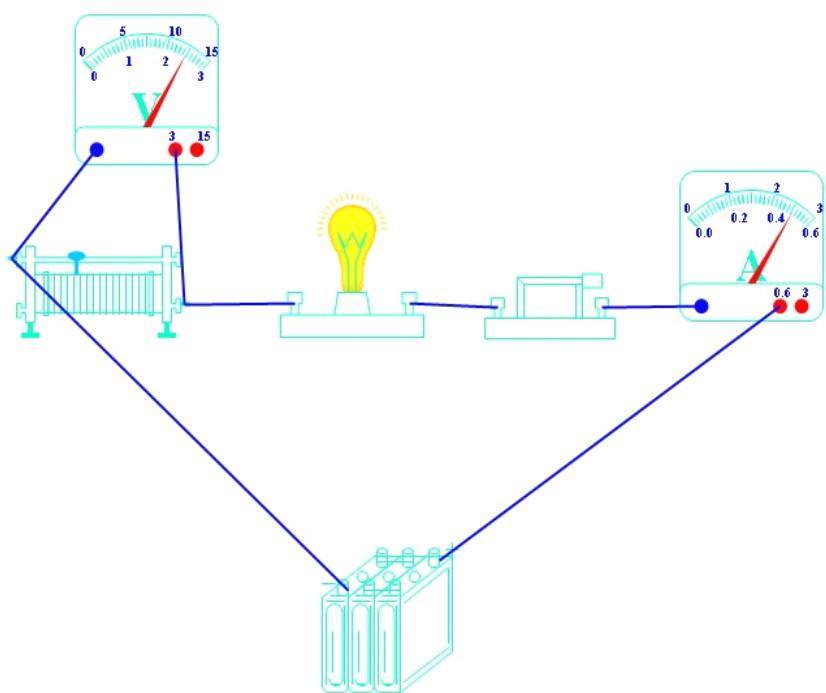


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To choose circuit element and make a complete CKT diagram



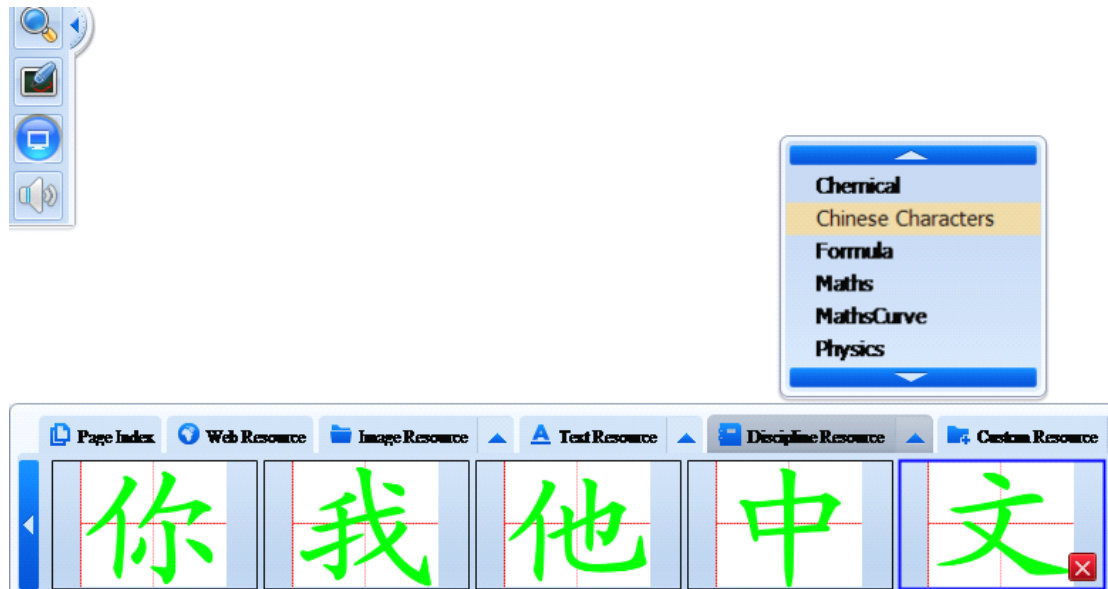
Connect the power, then voltmeter and ammeter can show the numbers after circuit element test. When you choose right mouse function and choose "on" can make the light on as photo below.



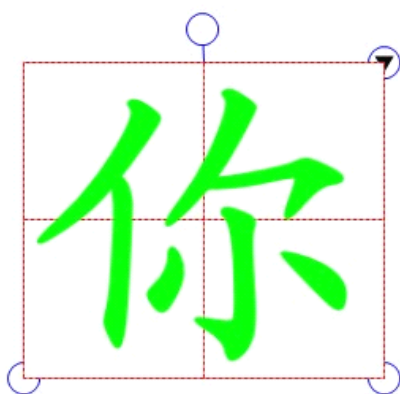


## Chinese Resources

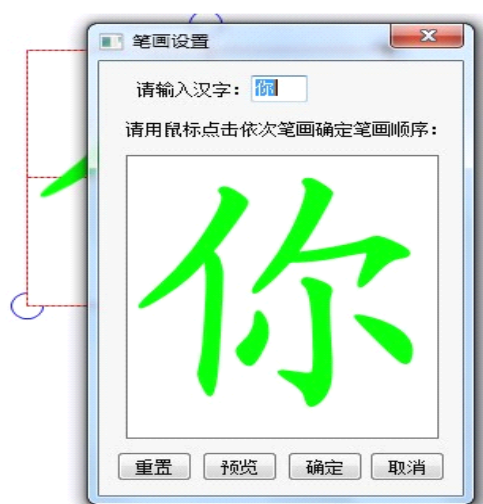
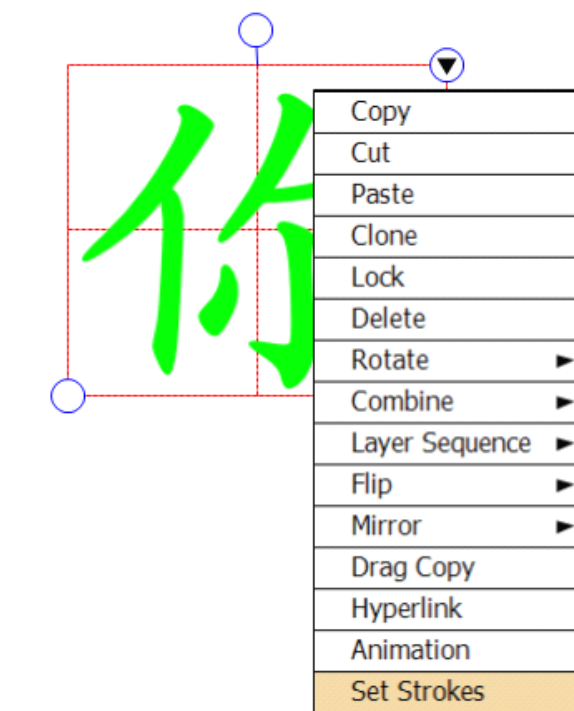
### 1、Strokes of a Chinese character



Choose one object and then drag on the page.

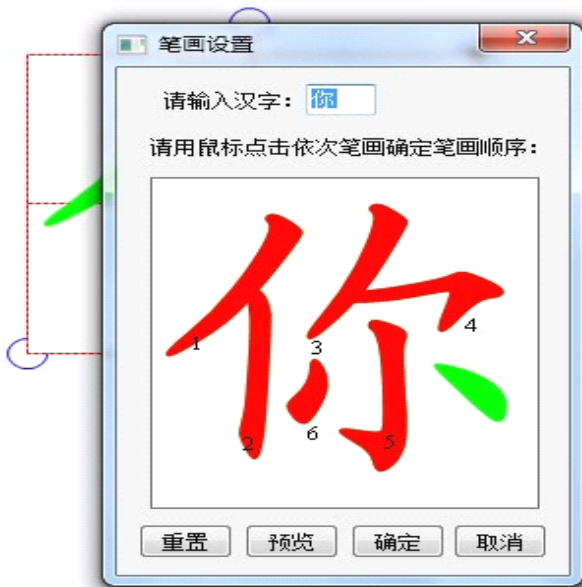
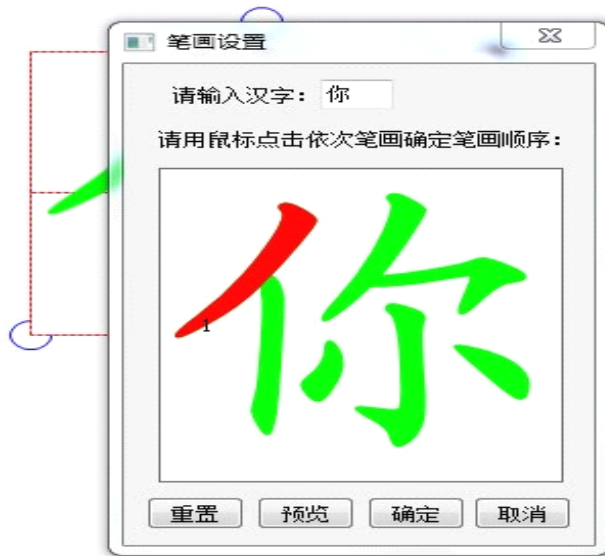


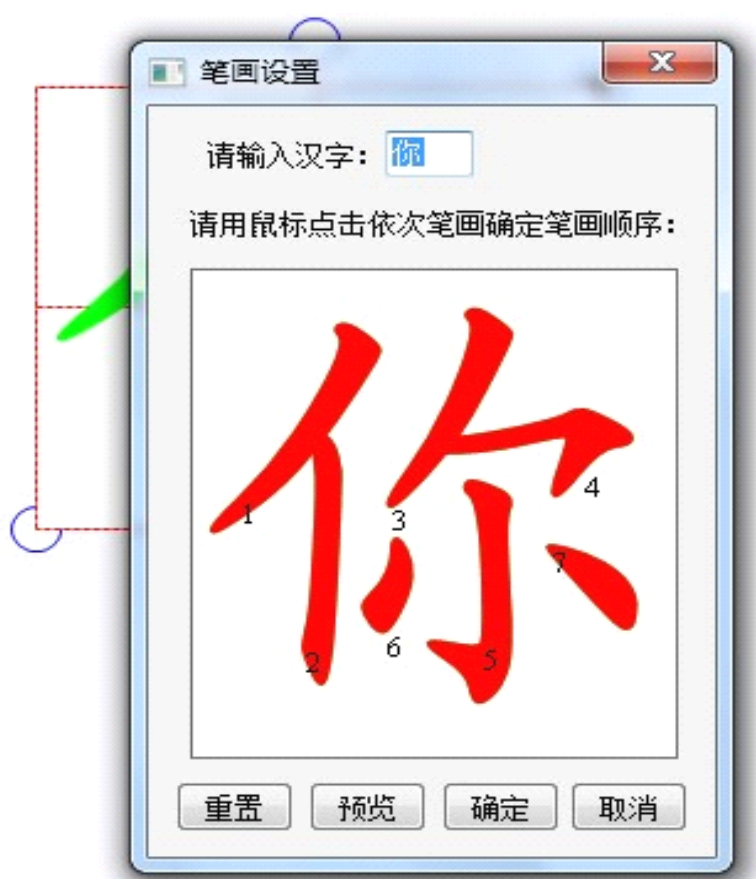
Set up a new strokes of a Chinese character



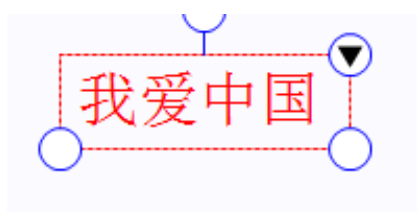
---

Choose setup and then make a new strokes of a Chinese character as operation below:



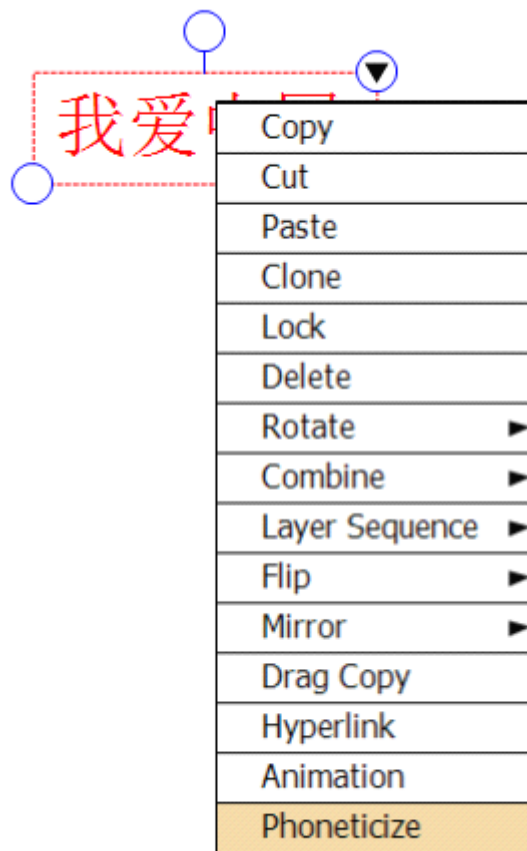


## 2、Chinese phonetic transcription



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Choose right mouse function and choose phoneticize as below:



[Thank you for using Interactive White Board !](#)